SAMSUNG

iPOLiS

Samsung Network Manager

SNM-128P User's Manual

Before attempting to connect or operate this product,
please read these instructions carefully and save this manual for future use.

ENGLISH

iPOLiS, a brand integrated into Samsung's network products, stands for a convenient world (Polis) made safe (Police) through Samsung's superior network performance (Internet Protocol). Our 1- and 4-channel video servers and network cameras support a wide selection of advanced network security system features including an Ethernet interface for convenient Internet connection, various image compression standards such as MPEG-4 and JPEG, high quality image transfer, basic web viewer, two-way audio, and network management software enabling remote control and multi-channel management.

Preface

The user who installs and operates the product shall be aware of this manual and other manuals referenced by this manual before the installation and operation and use it properly.

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The contents of this manual may vary from the actual software depending on its upgrade status, and its design and specifications may change without prior notice for the improvement of product performance.

Chapter 1. Overview

1.1. SNM-128P

The SNM-128P is a central surveillance system solution that can monitor a maximum of 1000 units installed in remote locations.

This software provides convenient monitoring features such as real-time video monitoring, video search and backup, and various system setup options. It supports a maximum of 6 monitors, enabling you to monitor up to 256 channels simultaneously in real time. It is also equipped with efficient search features including specific area and text searches.

The SNM-128P reports on the real-time situation of registered units via various methods, helping you understand and take appropriate countermeasures as quickly as possible. It also offers a feature to save and search event logs.
To manage multiple units efficiently, the software provides Screen Layout and Map options.
With a maximum of 6 monitors, this software can manage multiple networks as well as save error logs simultaneously.

To register and use products other than the SVR-3200, 1680, 1660, 1645, 960, and 45, their firmware version must be v2.8.0 or higher.

1.2. System Requirements

	Minimum	Recommended
CPU	Intel Core2 duo E6750 or higher	Intel Core2 Quad Q6700 or higher
Main Memory	2GB	2GB or higher
Video Memory	256MB	512MB or higher
Display Resolution	1280 x 1024 (with 32bit color) or higher	
Hard Disk	1GB or higher	
Operating System	Windows XP Professional / Window Vista Business	
Miscellaneous	DirectX 9.0 or higher	

1. **When using 6 monitors, do not activate the Live Viewer mode for more than 4 monitors simultaneously. Activating the mode for more than 4 monitors at the same time may decrease the display quality or performance of the software.**
2. **The performance of the monitoring system may be decreased if too many events are happening simultaneously in units registered to the SNM-128P. To maintain optimal performance of your monitoring system, minimize the chance of unnecessary events by changing the unit settings.**

The SNM-128P is optimized for Windows XP with Service Pack 3 and the Windows Vista series. To prevent viruses and malicious code on your monitoring system, install an anti-virus program and get the latest Windows updates for the operating system on a regular basis.

For real-time multi-channel monitoring, 2GB of memory is recommended for 128 channels and 4GB for 256.
4GB of memory is also recommended when using 512 or more units.

Using the default video drivers provided by Microsoft in conjunction with DirectX may cause flickering or decrease the display quality of the software. In such cases, uninstall DirectX or get the latest drivers for the corresponding video card.

1.3. Supported Devices

The SNM-128P supports devices as listed below.

Category	Model Name	Firmware
DVR	SVR-3200/1680/1660/ 1645/960/945	1.0.0 or higher
Network Camera	SNC-550	2.8.0 or higher
Network Camera	SNP-3300	2.8.0 or higher
Network Camera	SNP-3300A	2.8.0 or higher
Network Camera	SNP-1000	2.8.0 or higher
Network Camera	SNP-1000A	2.8.0 or higher
Video Server	SNS-100	2.8.0 or higher
Video Server	SNS-400	2.8.0 or higher
DVR	SVR-1630	4.8.0 or higher
DVR	SVR-1650	2.8.0 or higher
DVR	SVR-1640	2.8.0 or higher
DVR	SVR-950	2.8.0 or higher
DVR	SVR-940/450	1.4.0 or higher

1.4. Monitor Setup

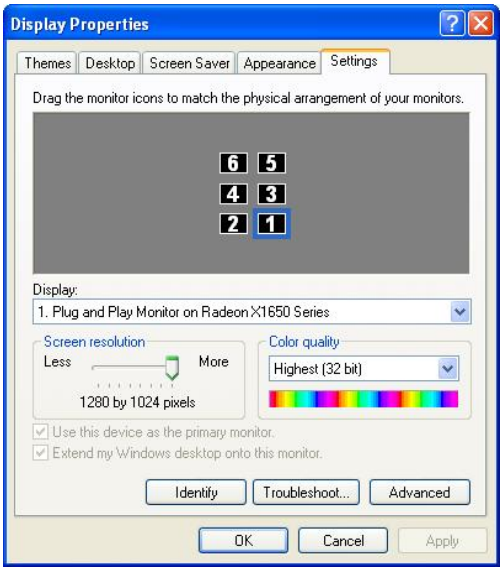
Install the VGA card in your monitoring system, and then connect the monitor cable.

Turn on the system power, and then start Windows.

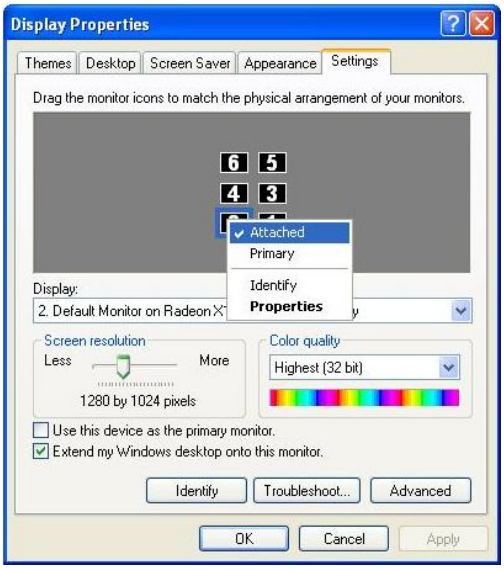
Right-click on the desktop.

Choose Properties. (On Windows Vista choose Personalize then Display Settings.)

The Display Settings window appears.



Click the Settings tab.



All monitors except the default monitor are grayed out.

To activate another monitor, place the cursor on the monitor icon, and then right click on the mouse.

Choose Attached, and then click "Apply" at the bottom of the Display Settings window.

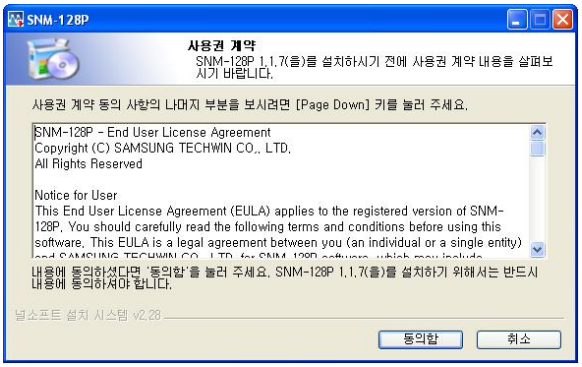
Adjust the resolution of the newly activated monitor to the SNM-128P recommended resolution.

1.5. Software Installation

Insert the SNM-128P USB key to your system.

In the SNM-128P Setup CD menu, run "SNM-128P_Setup_v1.x.x-USBKey.exe". The SNM-128P software requires administrator permissions to be installed.

Select your language, and then click "OK".


SNM-128P
사용권 계약
SNM-128P 1.1.7(을)를 설치하시기 전에 사용권 계약 내용을 살펴보시기 바랍니다.
사용권 계약 동의 사항의 나머지 부분을 보시려면 [Page Down] 키를 눌러 주세요.
SNM-128P - End User License Agreement
Copyright (C) SAMSUNG TECHWIN CO., LTD.
All Rights Reserved
Notice for User
This End User License Agreement (EULA) applies to the registered version of SNM-128P. You should carefully read the following terms and conditions before using this software. This EULA is a legal agreement between you (an individual or a single entity)
내용에 동의하셨다면 '동의함'을 눌러 주세요. SNM-128P 1.1.7(을)를 설치하기 위해서는 반드시 내용에 동의하셔야 합니다.
널소프트 설치 시스템 v2.28
동의함
취소

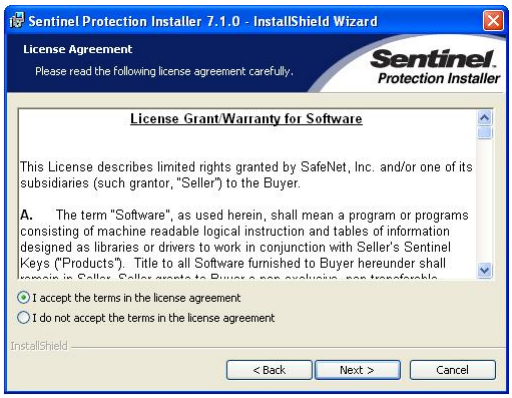
Click "I agree".

Make sure to insert the USB key prior installing the SNM-128P program. If your system does not have USB key drivers, the software will install the drivers for you.

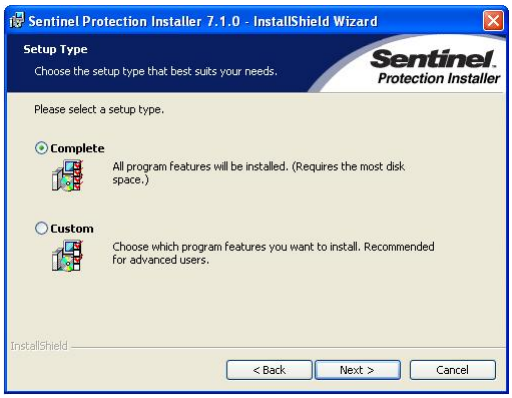
Sentinel Protection Installer 7.1.0 - InstallShield Wizard
Welcome to the InstallShield Wizard for Sentinel Protection Installer 7.1.0
The InstallShield(R) Wizard will install Sentinel Protection Installer 7.1.0 on your computer. To continue, click Next.
Sentinel
Protection Installer
< Back
Next >
Cancel

The picture above is the initial window of the USB key driver installation.

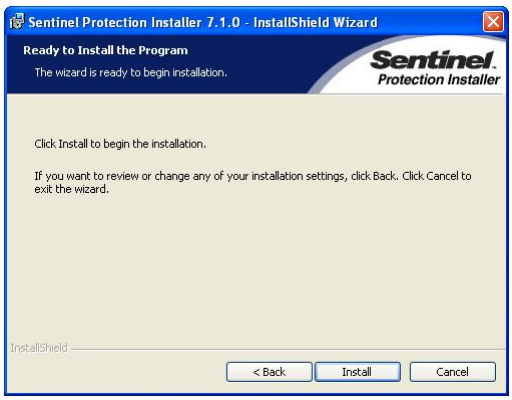
When the SNM-128P USB key driver installation window appears, click "Next".


Sentinel Protection Installer 7.1.0 - InstallShield Wizard
License Agreement
Please read the following license agreement carefully.
Sentinel
Protection Installer
License Grant/Warranty for Software
This License describes limited rights granted by SafeNet, Inc. and/or one of its subsidiaries (such grantor, "Seller") to the Buyer.
A. The term "Software", as used herein, shall mean a program or programs consisting of machine readable logical instruction and tables of information designed as libraries or drivers to work in conjunction with Seller's Sentinel Keys ("Products"). Title to all Software furnished to Buyer hereunder shall
I accept the terms in the license agreement
I do not accept the terms in the license agreement
InstallShield
< Back
Next >
Cancel

Check "I accept the terms in the license agreement," then click "Next".


Sentinel Protection Installer 7.1.0 - InstallShield Wizard
Setup Type
Choose the setup type that best suits your needs.
Sentinel
Protection Installer
Please select a setup type.
Complete
All program features will be installed. (Requires the most disk space.)
Custom
Choose which program features you want to install. Recommended for advanced users.
InstallShield
< Back
Next >
Cancel

Check "Complete," and then click "Next".


Sentinel Protection Installer 7.1.0 - InstallShield Wizard
Ready to Install the Program
The wizard is ready to begin installation.
Sentinel
Protection Installer
Click Install to begin the installation.
If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
InstallShield
< Back
Install
Cancel

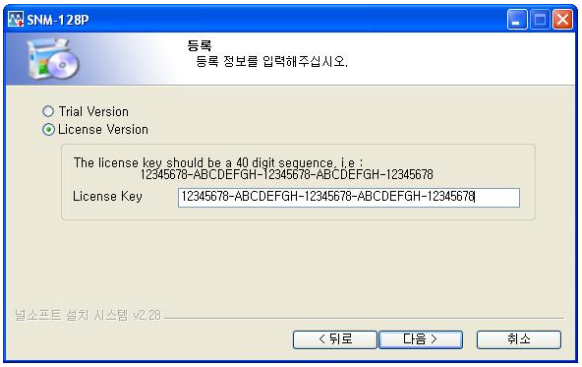
Click "Install".

Sentinel Protection Installer 7.1.0 - InstallShield Wizard
Windows XP detected!
The system is running Windows XP (SP 2 or higher)
Sentinel
Protection Installer
Important Note:
The setup program will install Sentinel Protection Server on this system. To allow accessing the Sentinel keys attached to this system by clients on the network, your firewall settings will be modified. This will not affect the existing security settings of this system. Do you want to enable these settings right now?
Tip!
To enable/disable these settings in future, refer to the steps provided in the Help provided with this software.
InstallShield
Yes
No
Cancel

Click "Yes".

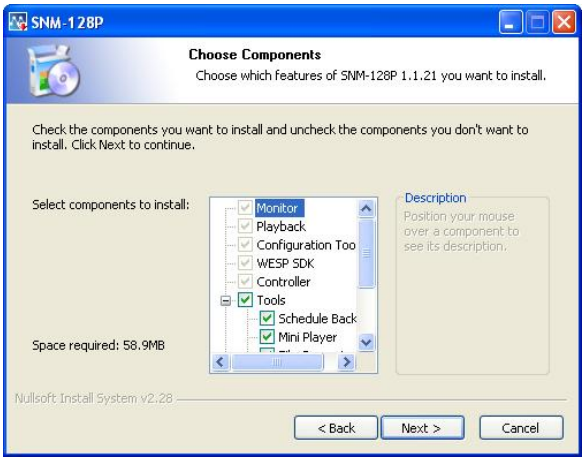
Sentinel Protection Installer 7.1.0 - InstallShield Wizard
InstallShield Wizard Completed
The InstallShield Wizard has successfully installed Sentinel Protection Installer 7.1.0. Click Finish to exit the wizard.
Sentinel
Protection Installer
< Back
Finish
Cancel

Clicking "Finish" completes the USB key driver installation.

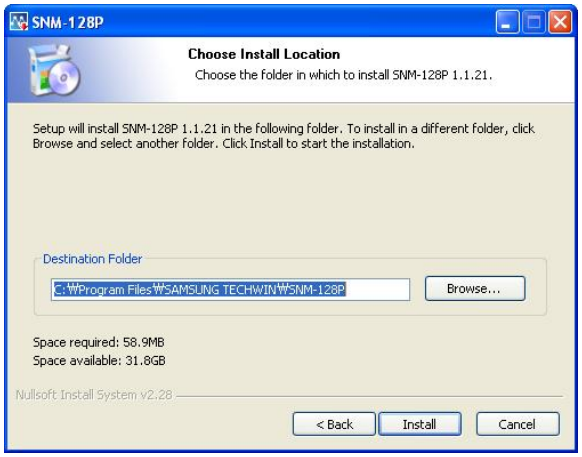


If the USB key drivers are successfully installed, the installation software automatically brings up a new window to verify the license key of the USB key. Check the license, and then click "Next".

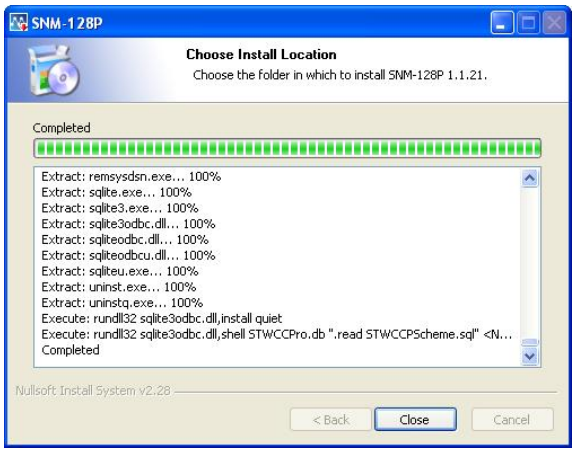
The trial versions of the drivers are available to try for 30 days. The software becomes disabled after the 30 day trial period.



Select the items to install, and then click "Next".


SNM-128P
Choose Install Location
Choose the folder in which to install SNM-128P 1.1.21.
Setup will install SNM-128P 1.1.21 in the following folder. To install in a different folder, click Browse and select another folder. Click Install to start the installation.
Destination Folder
C:₩Program Files₩SAMSUNG TECHWIN₩SNM-128P
Browse...
Space required: 58.9MB
Space available: 31.8GB
Nullsoft Install System v2.28
< Back
Install
Cancel

Choose an installation folder, and then click "Install".



Clicking "Close" completes the SNM-128P program installation.

1.6. Deleting Program DB

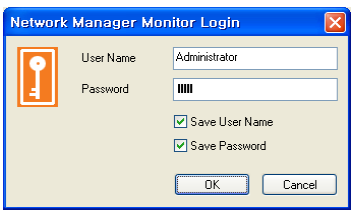
1.6.1. For Windows XP

Uninstall the program, and then delete the entire program folder at "C:\Program Files\SAMSUNG TECHWIN\SNM-128P".

1.6.2. For Windows Vista

Uninstall the program, and then in Windows Explorer click > View > Folder Options. Under the View tab, check "Show hidden files and folders" under Hidden files and folders. Then delete the entire "SNM-128P" folder at "C:\Users\UserName\AppData\Local\VirtualStore\Program Files\SAMSUNG TECHWIN\SNM-128P".

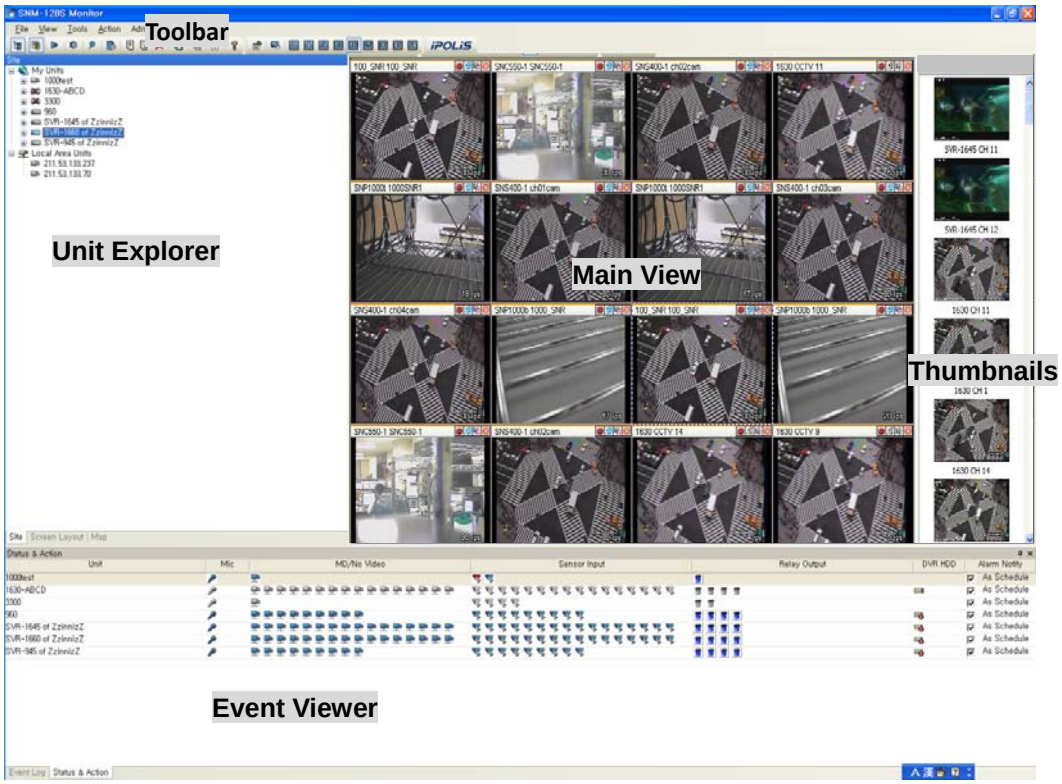
1.7. Program Login



Enter an ID and password, and then click "OK". SNM-128P runs if the ID and password match. The default login ID is "Administrator" and the default password is "12345". Permissions to run the program are limited depending on the user settings.

Chapter 2. SNM-128P Monitor

2.1 Interface



The SNM-128P provides upgraded UIs; you can drag and drop to move or dock any object on the screen and customize the screen elements fit to your needs. (For customizing the UI across multiple monitors, please refer to section 2.11.4, Monitor Layout Manager.)

2.1.1 View Areas

The Control Center screen consists of three different view areas: Unit Explorer at the left side, Main View in the center displaying video or map, and Event View on the bottom.

2.1.1.1 Unit Explorer

Displays units, screen layouts, and maps in the tree list corresponding to the current mode, and enables you to register, edit, or delete them.

(Chart: Unit Explorer Icons)

Icons	Description
	A folder that contains registered units.
	A sub folder under a registered unit; you can add sub folders under a registered unit for management.
	Failed to connect a non-hard disk unit.
	Failed to login to a non-hard disk unit.
	Logged in to a non-hard disk unit.
	Alarmed unit: when an alarm is activated, the target icon blinks red for 5 seconds.
	Unit under watch; every video channel of the target unit is under watch.
	Logged into a hard disk unit (DVR).
	Failed to login to a hard disk unit (DVR).
	Alarmed unit: when an alarm is activated, the target icon blinks red for 5 seconds.
	Failed to connect to a hard disk unit (DVR).
	Video channel status: displays if the status of the video channels of each unit is normal.
	Selected video channel status; displays when a specific video channel is under watch and the status of the video channels of each unit is normal.
	Sensor action: displays in blue if the sensor is off.
	Sensor action: displays in red if the sensor is on.
	Relay Out: off.
	Relay Out: on.
	Mike: displays when the mike is working properly.
	Mike: displays when the mike is currently in use.
	A registered screen layout.
	Event: displays if an event occurs in a unit under a registered screen layout.
	Map.

2.1.1.2 Main View

Displays the monitor screen and map window of a selected mode.

2.1.1.3 Event View

Event History displays the real-time situation of an event happening in a unit that is registered under My Unit.

Status & Action displays the event situation of each unit, and enables control of the relay output and audio output devices. is to hide windows or drag and dock the title bar.

2.1.1.4 Thumbnail

If the Thumbnail Popup Auto Action option is selected, a thumbnail displays when an event occurs. Double clicking on the thumbnail connects you to the event control station.

2.2 Toolbars

Frequently used features have toolbar buttons for your convenience.

(Chart. Toolbar Icons)

Button	Function
	Hides Unit Explorer.
	Hides Event View.
	Expands the Main View area to the full screen.
	Runs the Search program.
	Runs the Setup program.
	Searches saved events by date, unit, and category.
	Enables you to set various options.
	Adds units, screen layout, and maps.
	Enables you to edit settings for registered units, screen layouts, and maps.
	Deletes a unit, screen layout, or map.
	Saves the current monitoring screen as a screen layout.
	Refreshes the Unit Tree: updates connection status and unit list.
	Disconnects from all monitoring units or closes all map windows.
	Places a specific map on top of multiple map windows in the Map mode.
	Disconnects from a currently monitoring unit, or closes a map window.
	Cascade map windows.
	Aligns map windows as tiles.
	Split the monitor screen into 1, 4, 9, 13, 16, 25, 36, 49, or 64 screens.
	Displays the software version.
	Directs you to www.samsungipolis.com.

2.3 Site Mode

Site Mode enables you to register and manage multiple units. Units in Unit Explorer are displayed under the Local Unit folder in your system for convenient registration. Via icons, you can check unit models and their connection status.

2.3.1 Creating & Deleting Folders

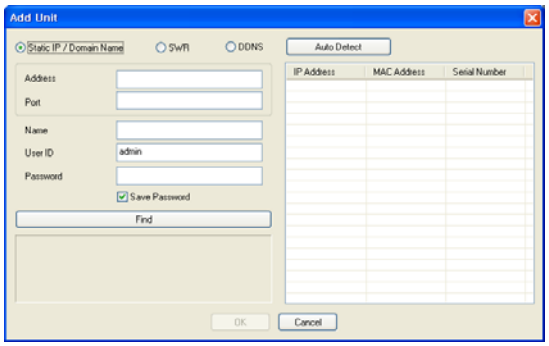
Right click on the My Unit folder, and then select "Add Folder" in the popup menu. When an input window appears, enter a folder name, and then click "OK" to create the folder.

To delete a folder, right click on a folder, and then select "Delete Folder". Please remember if the deleted folder contains units, the units are deleted at the same time.

2.3.2 Registering & Deleting Units

To add a unit, drag and drop a unit from Local Unit to My Unit, or right click on a unit and then click "Add Unit". The Registration message window then appears. You can also click the Add button on the toolbar. (The Add button may be inactive depending on the number of maximum units that is allowed per license.)

2.3.2.1 Registering Unit by Fixed IP / Domain Name



To register a unit through the "Add Unit" menu, enter the IP address and other information, and then click "Search".

Address

Enter the IP address of a unit to be registered in My Unit.

Port

Enter the port number for the IP address above.

Name

Enter a meaningful name for the unit to help you easily recognize it.

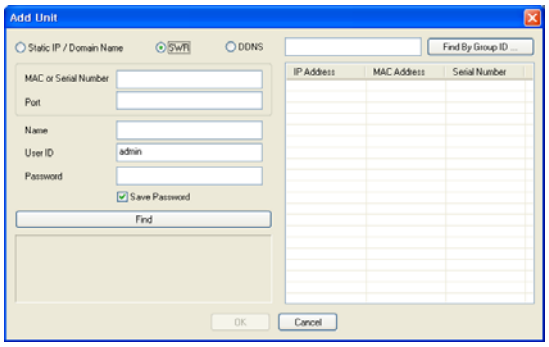
User ID

Enter your administrator or user ID.

Password

Enter the password for the ID.

2.3.2.2 Registering Unit Registered in SWR



For units with dynamic IPs, register them in SWR (Samsung Registration Server) for effective management.

MAC or Serial Number

Enter the MAC address or serial number of a unit that is registered on SWR.

For older models, enter the MAC address, and the serial number for newer models.

Port

Enter the port number for the IP address corresponding to the target unit.

Name

Enter a meaningful name for a target unit to help you easily recognize it.

User ID

Enter your administrator or user ID.

Password

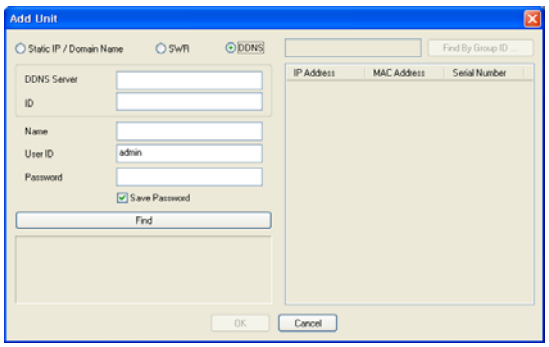
Enter the password for the ID.

Searching by Group ID

Enter the group ID of a unit, and then click Search.

If the group ID is entered correctly, the product information of the unit is displayed at the bottom of the window. If not, an error message like [Cannot find the unit.] appears.

2.3.2.3 Registering Unit Registered on DDNS



This is to register a unit that is registered in DDNS.

To use the DDNS option, you must register the target product at www.samsungipolis.com.

DDNS Server

Enter the address of the DDNS server: **ID**

Enter the ID of the product that is registered with the DDNS server.

Name

Enter a meaningful name for a target unit to help you easily recognize it.

User ID

Enter your administrator or user ID.

Password

Enter the password for the ID.

2.3.2.4 Changing Unit Information

To change the information of a registered unit, right click on a unit, and then choose "Edit Unit". A message window appears. You can also click the "Edit" button on the toolbar. Port Number and User Information can also be changed.

2.3.2.5 Deleting Units

To delete a registered unit, right click on the unit, and then choose "Delete Unit". You can also click the "Delete" button on the toolbar.

2.3.3 Renewing Unit Information

To refresh registered units and the unit list in the network, right click on the unit tree, and then select "Refresh". Or select the "Refresh Site Tree" button on the toolbar.

2.3.4 Viewing Video

When a connection between the monitoring system and a unit is established, the video channel of the unit is displayed in the unit tree. Selecting a video channel plays a live video of the corresponding unit in the currently selected monitor within the Main View. To change the monitor, drag and drop the channel icon to a different one.

To watch all channels of a unit, select the unit icon. The screen splits into several channels to play the videos.

2.4 Screen Layout Mode

For effective management, you can register a group of channels as a screen layout. To activate the Screen Layout mode, select the Screen Layout tab under Unit Explorer.

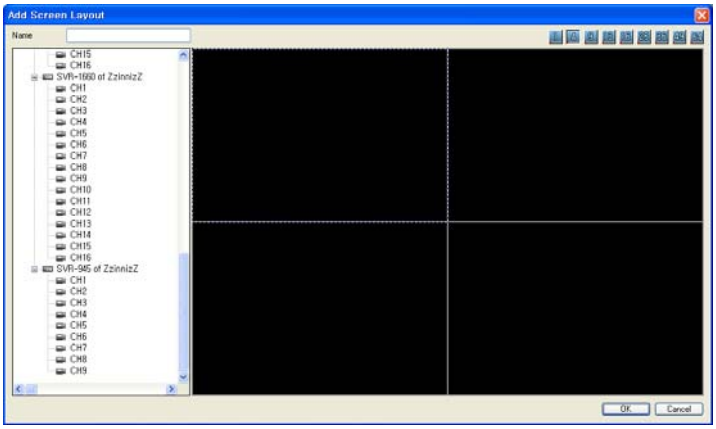
2.4.1 Registering & Deleting Screen Layouts

2.4.1.1 Saving Screen Layout

In the Site mode, you can save the current monitoring screen as a screen layout. To register a screen layout, select a channel, and then select "Save Screen Layout". When registering a screen layout, information for the current monitoring screen—division, transfer speed, and resolution—is registered at the same time.

2.4.1.2 Registering Using Menu

Right click on the desktop, and then choose "Add Screen Layout". The Registration message window appears. You can also simply click "Add" on the toolbar.



2.4.1.3 Changing Screen Layout Information

Right click on a screen layout, and then choose "Edit Screen Layout". A message window appears. You can also simply click "Edit" on the toolbar.

2.4.1.4 Deleting Screen Layout

Right click on a screen layout, and then choose "Delete Screen Layout". You can also simply click "Delete" on the toolbar.

2.4.2 Viewing Video

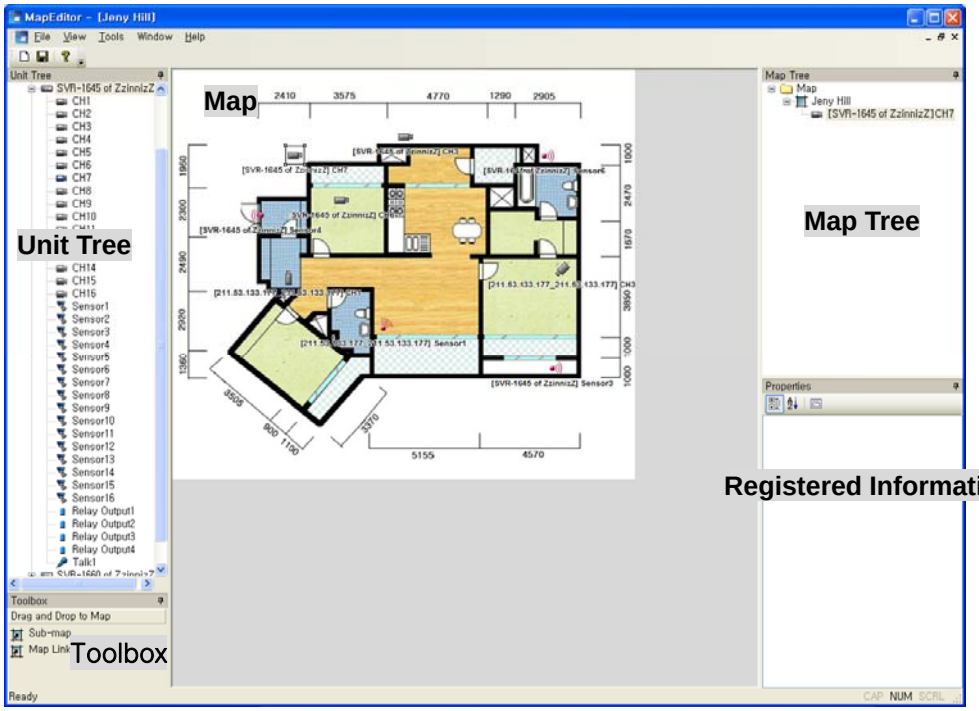
To play the videos of channels under a screen layout, select or drag and drop the screen layout. The screen is split into the division of the screen layout and the videos play.

2.5 Map Mode

For convenient management, you can map devices such as channels, audio outputs, relay outputs and sensors. To activate the Map mode, select the Map tab under Unit Explorer.

2.5.1 Map Editor

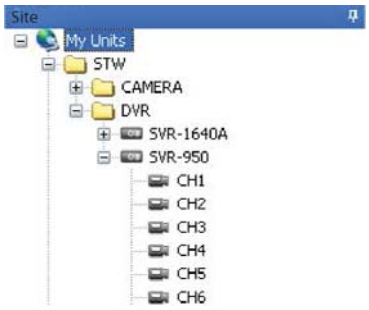
In the Map mode, run the Map Editor under Tools.



(Chart: Map Editor Toolbar)

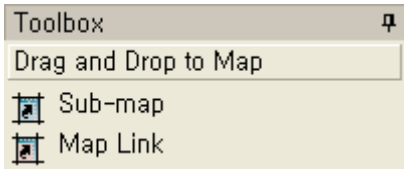
Button	Function
	Adds a map.
	Saves map information.

2.5.1.1 Unit Tree



Displays available units and devices for mapping. Units can be added only in the Monitor program.

2.5.1.2 Toolbox



To add a sub map or map link to a map, drag and drop these icons to a map.

2.5.1.2.1 Sub Map

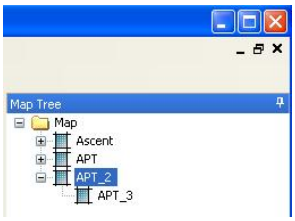
Enables you to create a sub map or related map under a higher map.

Adding Sub Maps

1. Open a map, and then drag and drop the Sub Map icon from the Toolbox to a location on the map.

2. A message window prompts you to select a sub map. When Make New is selected, the editor creates a new map, and then connects it as a sub map to the higher map. When Select Map is selected, the editor connects a selected map as a sub map to the higher map.
3. To change an existing sub map, select the Sub Map icon on a map or the map tree, and then edit the information in the Registered Information window.

4. To move to a higher map from a sub map, double click on in the higher map, or click on the X button in the window as shown in the picture below.

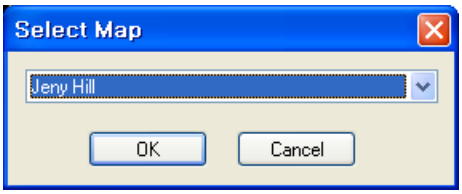


2.5.1.2.2 Map Link

Using Map Link, you can move among multiple maps with just one click.

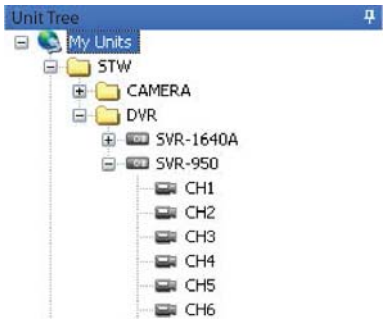
Adding Map Links

1. Open a map, and then drag and drop the Map Link icon from the Toolbox to a location on the map.



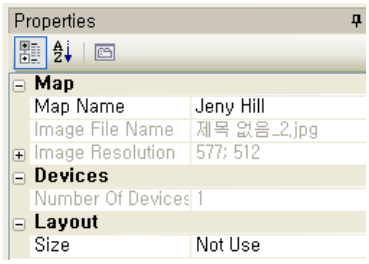
2. A message window prompts you to select a map to link. Select a map, and then press OK to link the map.
3. To change an existing map link, select the Map Link icon on a map or the map tree, and then edit the information under the Registered Information window.

2.5.1.3 Map Tree



Map Tree contains maps and devices that are registered in the maps. Selecting an item in the tree displays editable information of the item in the Registered Information window.

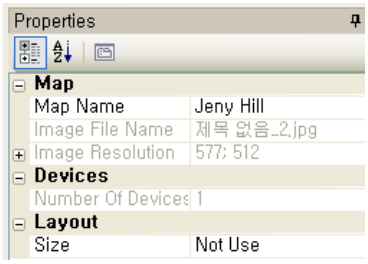
2.5.1.4 Registered Information



Enables editing the information of an item that is selected in the map tree.

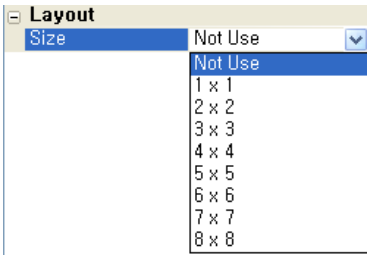
(Chart: Registered Information Available for Map Tree Icons)

Icon	Type	Registered Information
	Folder	Does not show in the Registered Information window.
	Map	The map name
	Sub Map	The map name and layout
	Map Link	The link name and target map
	Channel	Does not show in the Registered Information window.
	Sensor	Does not show in the Registered Information window.
	Relay	Does not show in the Registered Information window.
	Mike	Does not show in the Registered Information window.



2.5.1.4.1 Layout Map

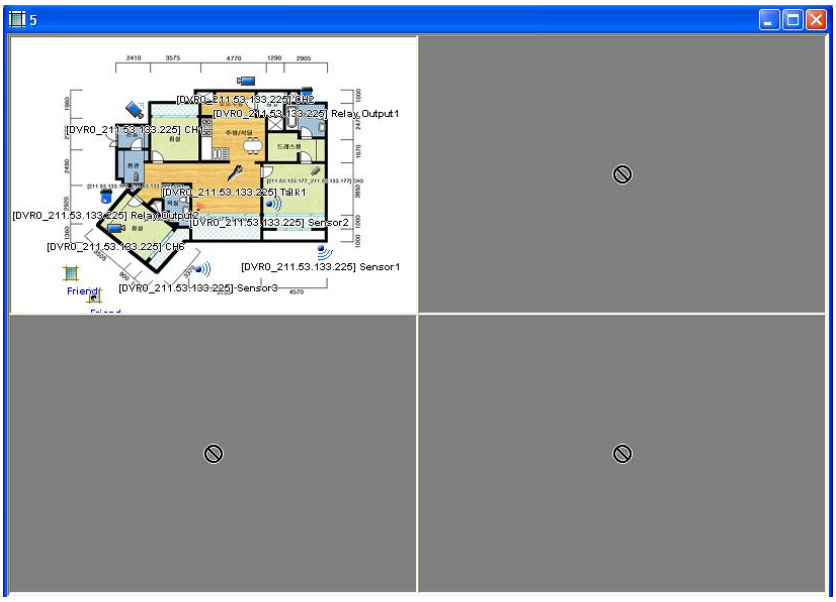
When a sub map is added, its higher map displays the Sub Map icon. To view the sub map, click the icon; it opens in a new window. To view the all sub maps of a map, open Properties, and then change the layout size of the maps.



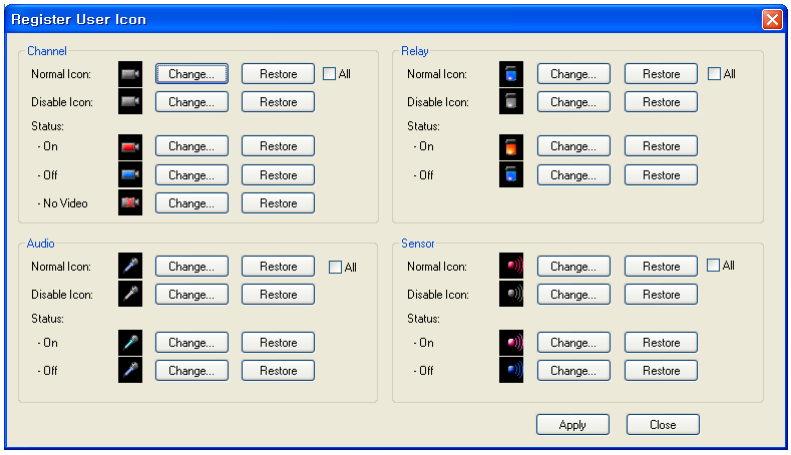
Layout sizes are available from 1 x 1 to 8 x 8. When a size is selected, a guideline is displayed. Each tile can contain only one map; devices or map links cannot be added.

When a layout size is selected and a higher map is open in the Monitor program, the screen displays the map as the example picture below.

If a sub map is not available, a layout tile displays . To enlarge a map, double click on the map.



2.5.1.5 Registering User Icons



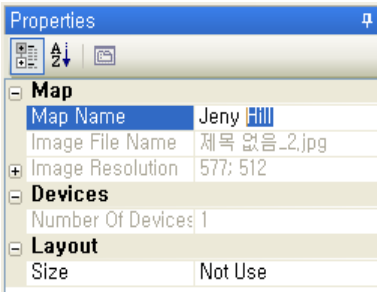
You can add customized images for map icons: Channel, Mike, Relay, and Sensor. Supported image formats are JPEG, GIF, and BMP. To add a customized icon, go to "Tools > Register User Icon" under the Edit Map menu.

2.5.1.6 Adding Maps

At the main menu, click . Select a map image, and then drag and drop it to the unit tree. When the map is successfully added, click , and then enter a name for the map.

You can change the direction of each device. To change to Rotation mode, double click on a device placed on a map icon, and then rotate the cursor while holding down the left button on the mouse. After changing the direction, double click on the device or click on a different icon to finish.

2.5.1.7 Editing Maps



On the map tree on the right side, double click on a map to open. If you want to change only the name of a map, right click on a map in the map tree, and then rename the map in the Properties window.

2.5.1.8 Deleting Maps

In the map tree, right click on a map, and then select Delete in the popup menu.

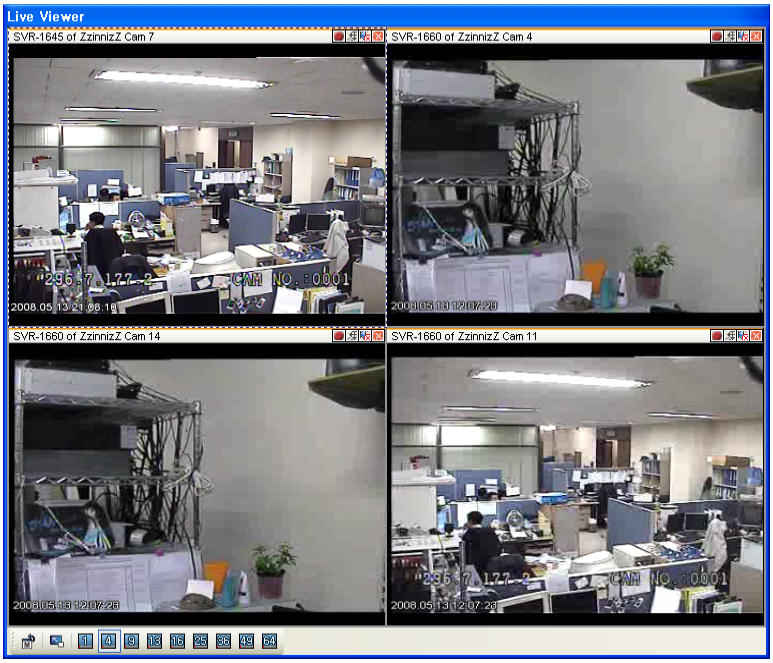
2.5.2 Viewing Map

Select a map in the map tree, then the map window opens.

2.5.3 Controlling Mapped Devices

2.5.3.1 Viewing Videos

Select a channel in the map tree, or the Channel icon in the Map window. Then the live video monitor appears.



2.5.3.2 Sensor

The Sensor icon on a map starts blinking if a sensor on the map is activated.

2.5.3.3 Relay Out

The Relay icon on a map starts blinking if the relay output has been turned on in the map.
To turn on or off the relay output, click on the Relay icon on the map screen.

2.5.3.4 Mike

You can transmit audio by clicking the Mike icon on the map tree, or opening a map and then clicking the Mike icon on the map.

2.5.4 Aligning Map Windows

If multiple map windows are open, you can align them by clicking the Cascade Windows or Align as Tiles option. To place a specific map on top of the map windows, click .

2.5.5 Switching Map

The button on the toolbar toggles when used. When activated, it opens new windows to navigate between opened maps or opens a new map. When it is disabled, maps are aligned next to each other, and you can navigate between maps by using the and buttons on the toolbar.

2.6 Monitor Screen

2.6.1 Screen Interface

The caption Title Area is located at the top of the screen. This area contains the name of units and channels, and buttons to control the recording, PTZ, and audio options. Time and event information is displayed in the video area.

(Chart. Monitor Menu Buttons)

Button	Function
	Saves video. (Maximum length: 10 min, re4 file)
	Performs PTZ operations.
	Turns audio on or off.
	Disconnects from the current monitor. (Close the current monitor.)

2.6.2 Split Screen

You can split the monitor screen into 1, 4, 9, 13, 16, 25, 36, 49, or 64 screens.

2.6.3 Full Screen

To expand the Main View window to full screen, click in the Tools menu. To return to normal view, press "Esc".

2.6.4 Switching Screens

To switch to a new monitor screen from the current screen, left click on the current screen, and then drag and drop it to a new screen.

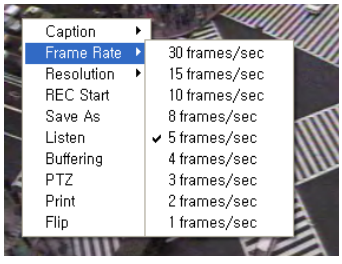
2.6.5 Caption Information

To check and change a caption option, select the option under "Caption" in the Monitor popup menu.

The caption options include Unit Name, Channel Number, Channel Name, Time, Event, and Speed.

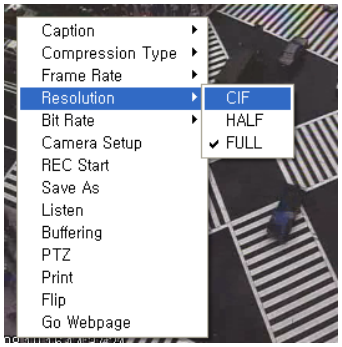
2.6.6 Video Transfer Speed

You can adjust the video transfer speed under "Transfer Speed" in the Monitor popup menu.



Only the SVR-1630, SNP-1000/1000A/3300/3300A, SNS-100/400, and SNC-550 support this option.

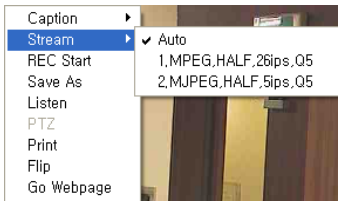
2.6.7 Video Resolution



When Auto is selected, the program automatically adjusts the resolution of the videos to the monitoring window size. When a specific resolution is selected, the program plays videos at the selected resolution regardless of the monitoring window size.

Only the SVR-1630, SNP-1000/1000A/3300/3300A, SNS-100/400, and SNC-550 support this option.

2.6.8 Streaming



When monitoring a model that supports MPEG4 streaming, a streaming menu appears in the Monitor popup menu.

When Auto is selected, the program requests the unit with an optimal resolution for the monitoring window size and system performance. Then the unit streams the video at a resolution closest to the requested resolution. When a specific resolution is selected, the program requests that resolution from the unit regardless of the monitoring window size or system performance.

Only the SVR-1645/1660/1680/3200/960/945 models support this option.

When monitoring MPEG4 streaming videos with SNM-128P, the number of channels per resolution is as listed below.

(*Streaming Speed: 30 fps)

Resolution	Channel
QCIF	32
CIF	8
HALF	4
FULL	2

Based on this chart, SNM-128P can monitor 1 MPEG streaming video at full-size resolution at 60 fps. When 3 or more videos of the full-size resolution are selected, it displays one per second. SNM-128P also displays one per second if the monitoring system is overloaded by other applications.

2.6.9 Event

When movement is detected, the icon appears on the video.

When a sensor is activated, the icon appears along with the sensor number.

2.6.10 Saving Images

2.6.10.1 Saving Videos

Select "Start Recording" in the Monitor popup menu, or click the recording button; the recording time is recorded. The maximum length of a video is 10 minutes. To select a drive to save videos, go to Tools > Options and select the Recording tab.

2.6.10.2 Saving Still Images

In the Monitor popup menu, select "Save Image" to save the current screen as a bmp, jpg, or eye-formatted file. Eye-formatted files are viewable using Internet Explorer. To select the Auto Save feature, image file formats, and a drive to save images, go to Tools > Options > Recording (tab) > Save Image (heading). (If Manual Save is selected, a message window asking to select a file format and filename appears upon selecting "Save Image".)

2.6.11 PTZ Control

2.6.11.1 Pan/Tilt Control

Select the "PTZ" menu in the popup menu, or click . When crosshairs appear in the center of the screen, use the mouse to perform the Pan and Tilt operations; click on the left or right side of the cross to pan, and the upper or lower side to tilt. The farther you click from the center, the faster the Pan and Tilt operations perform.

2.6.11.2 Zoom/Focus Control

To show the Zoom and Focus window, move your mouse to the left or right edge of the screen.

2.6.11.3 Moving to Preset

If preset locations are available, "Move to Preset" appears in the popup menu. Selecting a preset under the Move to Preset menu moves the screen to the selected preset location.

2.6.11.4 Subsidiary Functions

If preset locations are available, "Subsidiary Functions" appears in the popup menu. Selecting a subsidiary function commands the camera of a selected preset location to perform the corresponding operation.

Only the SVR-1645/1660/1680/3200/960/945 models support this option.

2.6.12 Audio Control

If a channel supports the audio feature, "Listen to Audio" appears in the popup menu, or the menu icon is activated. The default audio mode is muted. To listen to audio, select "Listen to Audio" in the popup menu or the menu icon; you can unmute, adjust the audio volume, and mix audio from multiple channels.

2.6.13 Buffering

Use Buffering to play a video smoothly when its transfer quality decreases at the full frame rate.

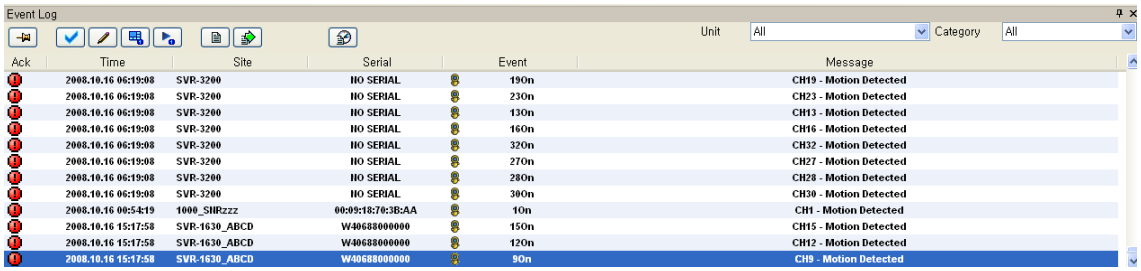
2.6.14 Closing All Monitors

closes the current video and map monitoring windows at once when clicked. In the Map mode, this button closes all map windows.

2.6.15 Event Log

Events reported from registered units are listed at the bottom of the Control Center window.

2.6.16 Status & Action


Event Log
Unit
All
Category
All
Ack
Time
Site
Serial
Event
Message
2008.10.16 06:19:08 SVR-3200 NO SERIAL 19On CH19 - Motion Detected
2008.10.16 06:19:08 SVR-3200 NO SERIAL 23On CH23 - Motion Detected
2008.10.16 06:19:08 SVR-3200 NO SERIAL 13On CH13 - Motion Detected
2008.10.16 06:19:08 SVR-3200 NO SERIAL 16On CH16 - Motion Detected
2008.10.16 06:19:08 SVR-3200 NO SERIAL 32On CH32 - Motion Detected
2008.10.16 06:19:08 SVR-3200 NO SERIAL 27On CH27 - Motion Detected
2008.10.16 06:19:08 SVR-3200 NO SERIAL 28On CH28 - Motion Detected
2008.10.16 06:19:08 SVR-3200 NO SERIAL 30On CH30 - Motion Detected
2008.10.16 00:54:19 1000_SIRzzz 00:09:18:70:3B:AA 1On CH1 - Motion Detected
2008.10.16 15:17:58 SVR-1630_ABCD W40688000000 15On CH15 - Motion Detected
2008.10.16 15:17:58 SVR-1630_ABCD W40688000000 12On CH12 - Motion Detected
2008.10.16 15:17:58 SVR-1630_ABCD W40688000000 9On CH9 - Motion Detected

Displays the real-time information of events occurring in registered units.

The buttons on the upper left side of the window toggle. When toggled ( ), the selected information is retained in the display area regardless how many events are logged.

(Chart: Event Icons)

Button	Function
	Detect Movement
	Sensor

Button	Function
,	Relay
,	Detected or Lost Video
	Input Text
	Authorization Failure
	Change Settings

You can sort events by the unit and category.

(Chart: Event Toolbar)

Button	Function
	Fix Log: retains a selected log in the display area.
	Check Log
	Comment: enables you to leave a comment in the log list.
	Instant Viewer
	Instant Player
	Details
	Action
	Alarm Control Station
	Search Event

2.6.17 Viewing Videos

Double clicking on an event log starts monitoring the event channel. When Motion Detection is selected, only the MD channels are displayed on the monitoring screen. Sensor and Relay display the all channels of the event unit in split screens.

When a channel that is already in display is selected, the screen focus changes to the monitor of the corresponding unit.

In the Map mode, the monitoring window pops up.

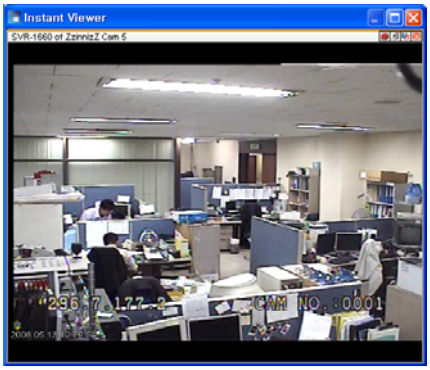
2.6.18 Processing Events

Unchecked events are highlighted in bold.

The administrator can double click, or click (Check) or (Comment) to check and leave comments on events.

2.6.19 Instant Viewer

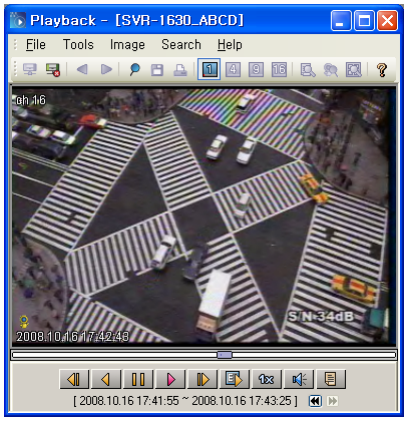
Select an event log, and then click (Instant Viewer) to run the single-channel viewer and watch a live video.



If a selected log is not a 1-channel event, this button is grayed out and you cannot run Instant Viewer.

2.6.20 Instant Player

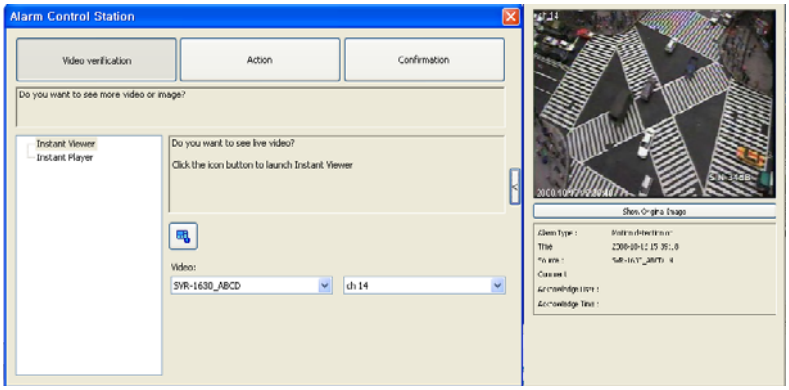
Select an event log, and then click (Instant Player) to run the playback program and search videos that are recorded in the DVR of the event unit**.**



If the event unit is not equipped with a HDD, this button is grayed out, and you cannot run Instant Player.

2.6.21 Alarm Control Station

The Alarm Control Station window as shown below enables you to take countermeasures for a selected event. To open the window, select an event log and then click (Alarm Control Station), or double click the thumbnail.



2.6.21.1 Analyzing Video

Instant Viewer

Shows the video of a channel under the selected device.

Instant Player

Searches channels in the selected device.

2.6.21.2 Action

E-Mail

Enables you to send e-mails attached with images to others.

Print

Enables you to print images.

Save

Saves images.

2.6.21.3 Check

Check

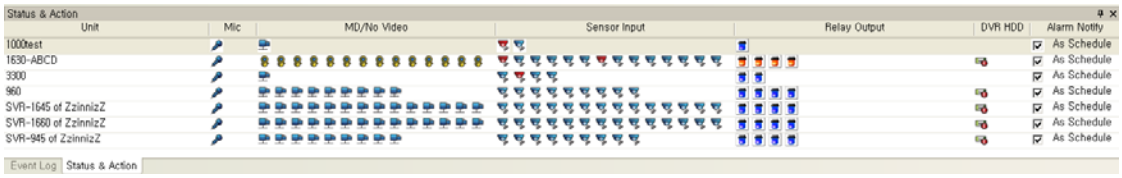
You can mark events as checked under the Check tab. When an event is checked, the left icon changes from to .

Comment

Enables you to leave a comment on an event.

2.7 Status & Action

To open Status & Action, select the tab in Event View.



2.7.1 Status & Action Information

Displays the current video channel and sensor of units registered in My Unit.

You can perform various actions such as Relay Out and Audio Out under this tab. To perform an action, select an icon. Audio Out enables you to send audio to multiple units at a time.

This tab also displays the current time of each unit.

(Chart: Status & Action Icon)

Button	Function
, , ,	Motion Detection, Activate Channel, Lost video, Disable Channel
,	Input Sensor
, ,	Relay Output
,	Mike On/Off
, ,	Displays the HDD status (In the order listed)
	Record Disabled
	Recording
As Schedule ,	Event alert; As scheduled
Always On ,	Always on
Always Off	Always off

2.7.2 Viewing Videos

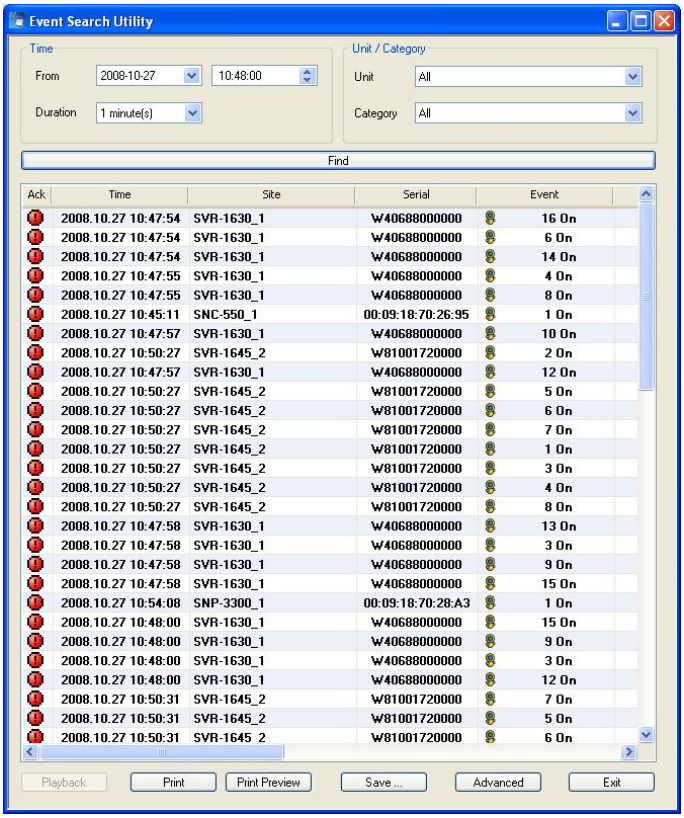
Double clicking on an event log starts monitoring the entire channels of the unit. The monitoring screen is splint into the number of channels. In Map mode, the monitoring window pops up.

2.7.3 Selecting Different Event Alert Types by Unit

You can set up a different event alert method for each unit by using the Event Notice column at the far right side. There are three different alert types: Always on, Always off, and As scheduled. The default parameter changes from Always on to As scheduled and Always off each time the option is clicked. You can set up an event alert type and edit the notice schedule at Tools > Options > Event Notice (tab).

2.8 Searching Event

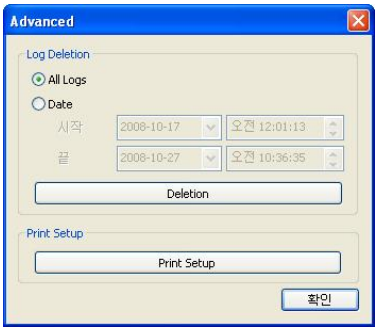
The SNM-128P saves all event logs and allows you to search them by time, unit, and category. To search, click (Event Search Utility) on the toolbar.



Enter search conditions, and then click "Search". The event log search results are displayed.

The screen displayed in the window is identical to the one in the Monitor program and allows you to open the Alarm Control Station window.

When a searchable unit is selected, the Search button is activated.

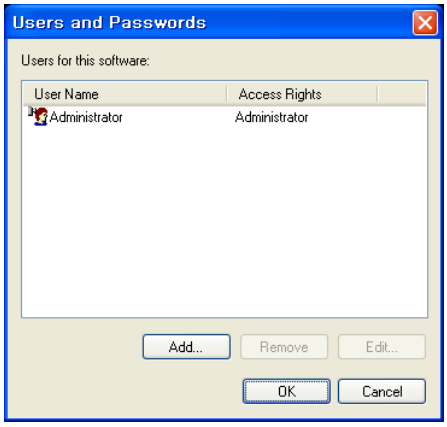


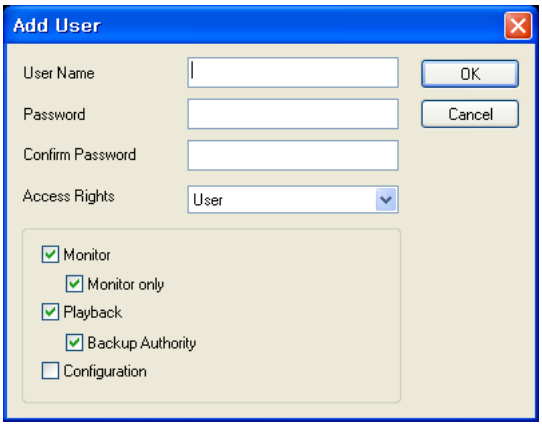
You can delete all logs or a specific block of event logs under the Advanced tab in the Event Log Utility window.

2.9 User Settings

User Settings are to manage program users. Upon installation, the program creates an administrator ID with all permissions. The administrator ID cannot be deleted.

To manage users, select the User Settings menu under the Administrator menu.



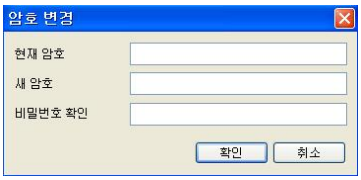


To add a user, click "Add".

Available permissions are Monitor, Search, Setup Program. When only Monitor is selected, the user cannot modify program information such as units, screen layouts, maps, and user settings.

2.10 Changing Passwords

Allows you to change the password for user IDs. To change a password, select the Change Password menu under the Administrator menu.

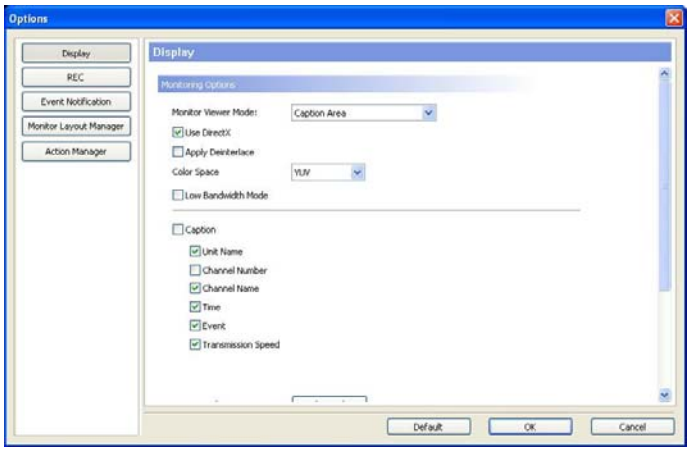


Enter the current password, a new password, confirm the new password, and then click OK to apply the change.

2.11 Setting Up Options

Allows you to set up various options. To set up options, go to Tools > Options.

2.11.1 Display



Monitor Viewer Mode

The "Full" mode shows a video in full screen mode.

The "Fit to Ratio" mode shows a video fit to the original screen ratio of the video.

The "Caption Included" mode displays the Caption area and a video fit to the original screen ratio of the video.

DirectX

When the Use DirectX box is checked, video is rendered with DirectDraw. The video graphic quality varies depending on your graphic card performance.

Deinterlacing

Deinterlaces video: Can be used only with D1 video settings.

Color Space

An MPEG4 streaming video at full-size resolution can be played at 120fps in YUV mode and 60fps in RGB mode. When more than 4 full-size YUV videos or 2 full-size RGB videos are selected, the program displays one per second. SNM-128P also displays one per second if the monitoring system is overloaded by other applications.

The monitoring performance of the program may vary depending on the performance of your system: CPU, graphic card, and memory.

Low bandwidth mode

Improves the monitoring performance in a low-speed network environment.

Caption

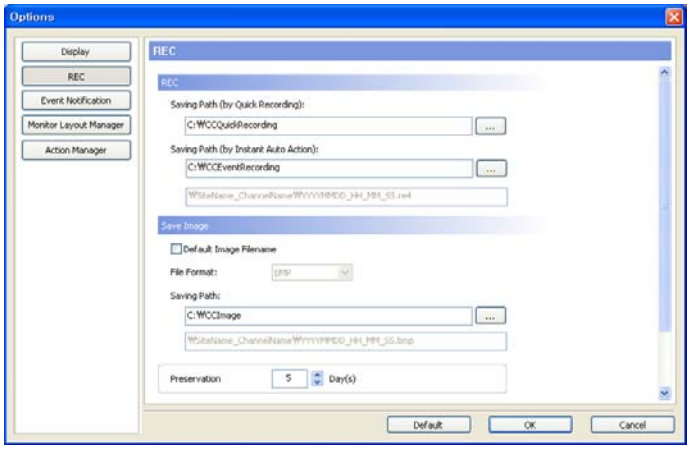
Enables you to set up Caption Information, View Mode, and Map Options in Monitor View. You can hide or unhide Unit Name, Channel Number, Channel Name, Time, Event, and Transfer Speed displayed in the caption area.

The font color and size for the caption text are also customizable.

Map Options

Selecting Unit Name shows a unit name next to a device name registered on a map.

2.11.2 Recording



2.11.2.1 Recording

Selecting Quick Recording Directory (Quick Save)

Select a drive to save quick-recorded video files.

When a drive is selected, the CCQuickRecording folder is created in the directory. Under the folder, video files are saved as ref4 files, named by the recording date, under sub folders named by the unit name_folder name.

Selecting Event Recording Directory (Auto Action)

This option is to select a drive for the "Recording" option in the Auto Action menu. When a drive is selected, auto-recorded video files are saved as ref4 files, named by the recording date, under sub folders named by the unit name_folder name within the CCEventRecording folder in the drive.

2.11.2.2 Save Image

Select a drive to auto-save images.

Check on or off on the Name files automatically box, and select an image file format. (BMP,

Wavelet (EYE), JPEG)

When a drive is selected, the CCImage folder is created in the directory. Under the folder, image files are saved as bmp, jpg, or eye files, named by the saved date, under sub folders named by the unit name_folder name.

Retention

You can select a retention period for saved files. When the period expires, saved files are automatically deleted.

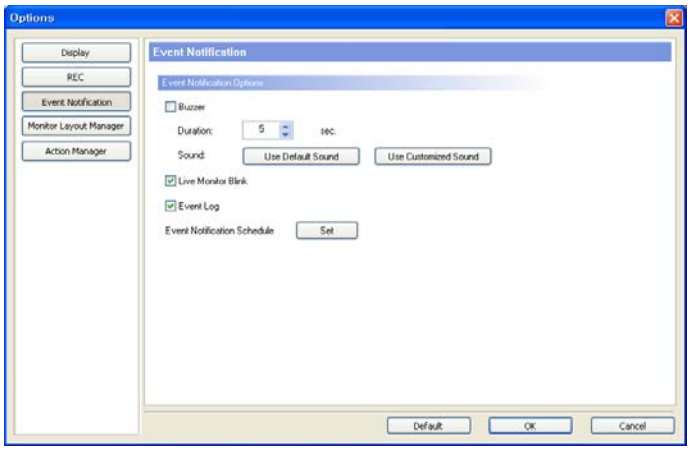
Retention dates can be between 1 and 180 days. The default period is 5 days.

2.11.2.3 Quick Save Recording Length

Select the maximum length of video files recorded by the "Start Recording" option in the Monitor popup menu.

Available lengths are from 1 to 10 minutes.

2.11.3 Event Alert



2.11.3.1 Alarm

When the Alarm box is checked, the program plays a sound a selected number of times for a selected duration each time an event is logged.

2.11.3.2 Action Duration

Select the running time of event videos.

2.11.3.3 Sound Settings

To use the SNM-128P default sound, click the Default Sound button. To use a customized sound, click Custom Sound and then select a sound file.

Supported audio file formats are wav and mid.

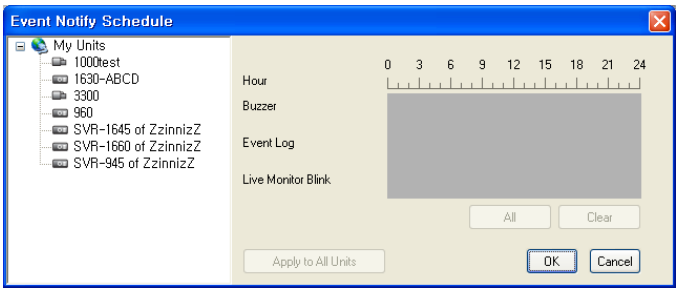
2.11.3.4 Display on Video Monitor

Check or uncheck the box to highlight an event area on the video in red.

2.11.3.5 Event Log

Check on or off to display the Event icon in event logs. Even if the box is not checked, important events such as failed authorization and hardware failures are always displayed.

2.11.3.6 Event Alert Schedule

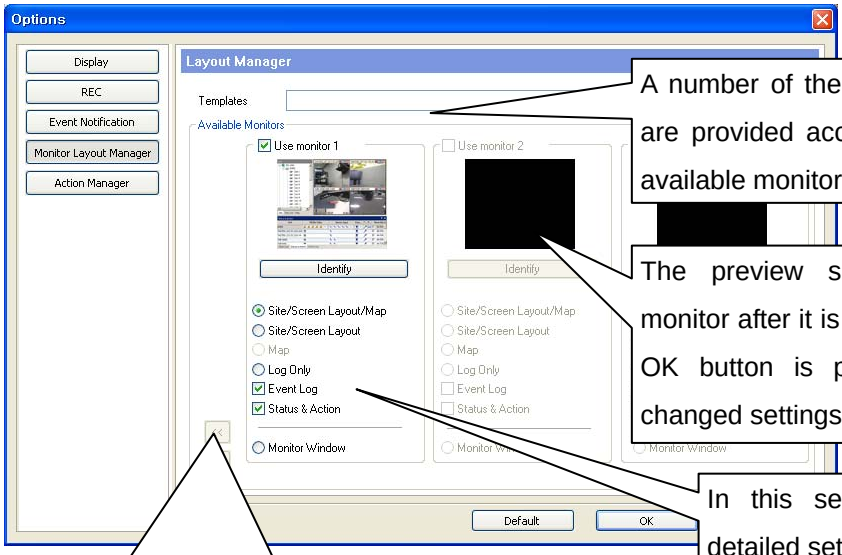


When the Setup button is clicked, the Event Alert Schedule appears, allowing you to edit the event alert schedule of a unit. Select a unit, and then turn on (blue) or off (gray) an alert type per hour. To apply the current schedule to the entire units, press the Apply to All Units button. Pressing All turns on all alert types per hour, and Remove turns off all alert types per hour.

Keeping the event alert schedule on at all times may overload the system database with a large number of event logs. Too many event logs can cause system malfunctions. Please make sure to remove event logs using the Event Search Utility on a regular basis.

2.11.4 Monitor Layout Manager

The SNM-128P supports up to 6 monitors. You can set up each monitor with different settings. Upon the installation and when a new user is logged in, the program activates only 1 monitor. To set up multiple monitors, go to "Options > Monitor Layout Manager".



A number of the basic monitor templates are provided according to the number of available monitors.

The preview screen is provided per monitor after it is selected and set up. The OK button is provided to confirm the changed settings.

In this section, you can set up detailed settings of a monitor.

These navigation buttons are activated when 4 or more monitors are selected.

The Monitor Layout Manager window provides templates depending on the number of available monitors. For instance, if your system has 2 monitors, you can select a template with only 2 monitors and the << and >> buttons are grayed out.

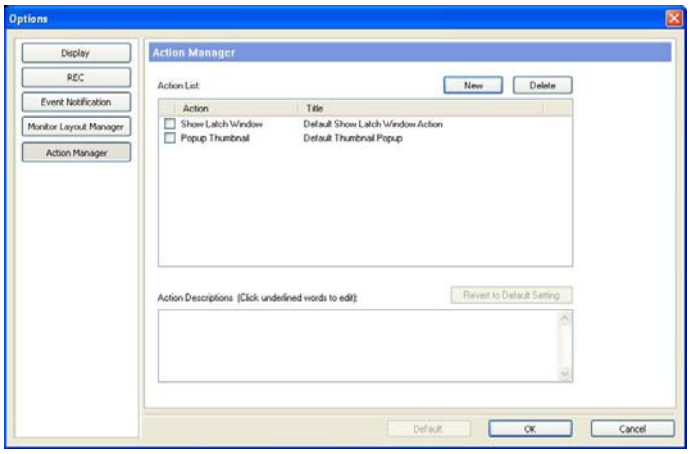
Settings	Description
Site/Screen Layout/Map	Adds the Site, Screen Layout, and Map tree modes to the selected monitor; displays the Monitor window in the Site and Screen Layout mode, and the Map window in the Map mode.
Site/Screen Layout	Adds the Site and Screen Layout tree modes; displays the Monitor window only.
Map	Adds the Map tree mode only; displays the Map window only without the Site and Screen Layout tree modes and the Monitor window.
Log	Select if the monitor is used only to log events or perform the Status & Action feature. When neither Event Log or Status & Action is not selected under Log, the monitor becomes disabled as if it is not physically selected.
Event Log	Displays event logs in real time.
Status & Action	Displays the status of units and Status & Action feature.
Monitor Window	Select if the monitor is used only to watch video; this exclusive option cannot be used in conjunction with any other options listed above.

2.11.5 Instant Auto Action

Allows you to set up actions that are activated automatically when an event occurs.

2.11.5.1 Action Manager

Select Action Manager under Tools > Options.



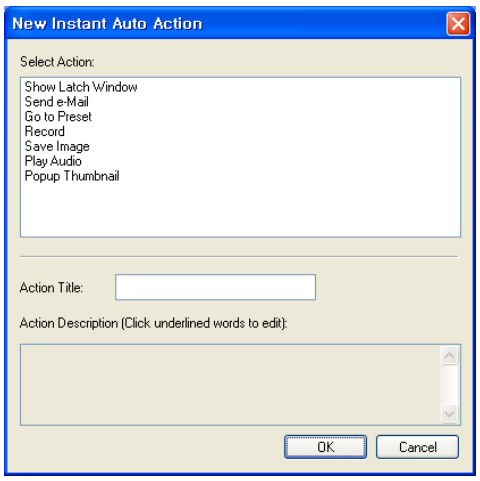
2.11.5.1.1 Adding Actions

To add a new action, click "New".

Available auto actions are Pop up event, Show latch window, Send e-mail, Move to preset, Save video, and Save image. To activate auto actions, you must select a unit, types of events, and specific conditions for each action.

Available event types are Motion detection, Sensor, Input text, No video, Change settings, Authorization failure, Disconnected from unit, and Hardware error.

When creating a new action, you can name the action for convenient reference.



2.11.5.1.2 Changing Action Information

Action information can be changed, but the type cannot be changed.

2.11.5.1.3 Deleting Actions

To delete an action, select an action and then click "Delete".

2.11.5.1.4 Action List

The "Select Action" section lists brief information for the current actions. To disable an action, uncheck the box next to the action. (☑ > ☐)

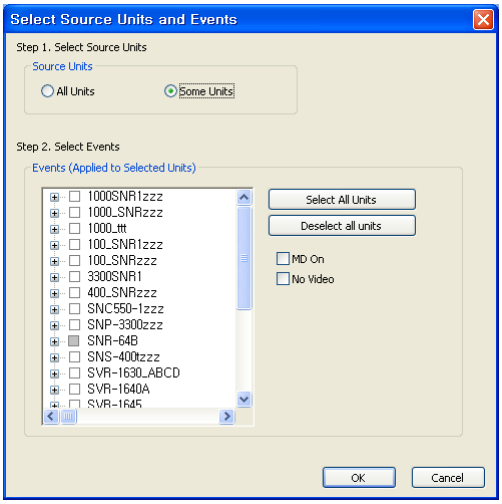
2.11.5.1.5 Action Description

The "Action Description" section displays conditions to activate an action. To change the detailed settings, click on an underlined area.

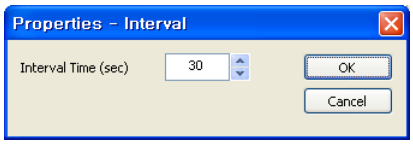
(Chart: Action Settings)

Action	Action Description Example
Show latch window	When an event occurs in a unit { all units }, show the latch window.
Send e-mail	When an event occurs in a unit { all units }, send an e-mail to { recipient name } once every { intervals } only if it is { scheduled }.
Move to preset	When an event occurs in a unit { all units }, { move to the unit, move to the event channel, move from the current channel to the preset, move to the preset} for { duration }, only if it is { scheduled }.
Recording	When an event occurs in a unit { all units }, record the video of the unit { of the unit channel } ({Resolution: CIF, 5fps, Duration: 5 seconds}) only if it is { scheduled }.
Save image	When an event occurs in a unit { all units }, save the image of the unit { of the unit channel } ({Format: BMP, Resolution: CIF, 1fps, Duration: 1 second}) only if it is { scheduled }.
Audio Play	When an event occurs in a unit { all units }, play { the audio unit } only if it is { scheduled }.
Pop up thumbnail	When an event occurs in a unit { all units }, display the thumbnail image of { the channel } only if it is { scheduled }.

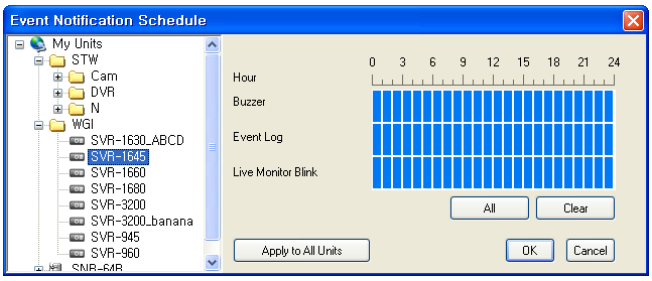
2.11.5.1.6 General Action Settings



To activate actions, you must select units and events. To set up multiple units with multiple events, select a group of units in the unit tree, and then click on events listed on the right side. Among the available events, Motion detection and Sensor can be set up per channel. The available number of channels is equal to the channels supported by a selected unit.



Select the duration of an action. (Unit: seconds)



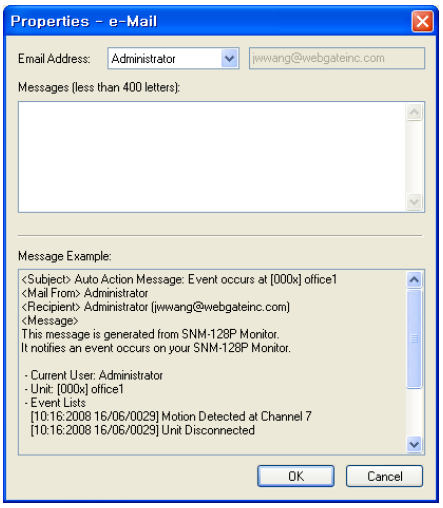
You can schedule actions. To set up an action schedule, select a unit in the left unit tree, and then select actions for the course of 24 hours. For more information about setting up schedules, please refer to section 2.11.3.6, Event Alert Schedule.

2.11.5.2 Latch Window

Show or hide a latch window when an event occurs. The latch window is to report the status of an event and describe countermeasures taken for the event. It is usually used to report critical errors such as a sudden disconnection and hardware errors. The countermeasure description is saved and searchable through the Search Utility at Tools > Error.

2.11.5.3 Sending E-Mail

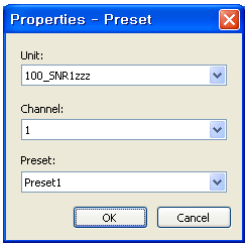
Send an e-mail to a selected e-mail address when an event occurs. You can add a message to the e-mail.



Select an e-mail address and then write a message in the blank box.

2.11.5.4 Move to Preset

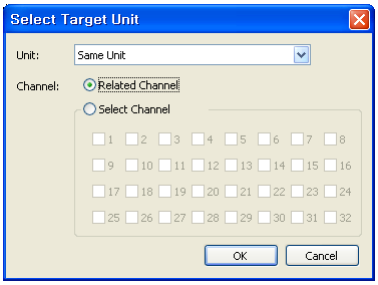
When an event occurs, move the camera to a selected preset.



Select a unit, a channel, and then a preset number.

2.11.5.5 Recording

When an event occurs, record the video for a set duration. The video file is saved in a directory that is selected under the "Recording" tab in the "Options" window.



To save video from a unit with an event, select all units. To save the video of a different unit, select a single unit. Selecting Same Unit and checking Related Channel saves the video of an event channel. Sensor saves events of the channel that is selected under "Options > Event Alert > Event Alert Schedule," but does not save non-video events. To select a different channel, select "Select Channel" below Related Channel and then select a channel.

Select a resolution (QCIF, CIF, Full(D1)), transfer speed, recording duration, and file interval to save video files.

When the Auto Recording option is selected for multiple units, the recording settings--resolution, transfer speed, etc.--are automatically selected according to the settings of the units.

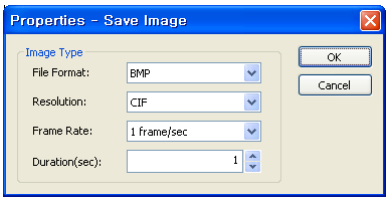
Video files are saved in a hard drive that is selected under "Options > Recording," under the CCEventRecording folder. Saved video files are re4 files named by the recording date in sub folders named by unit name.

Available transfer speeds are from 1 to 30 fps.

Available recording durations are from 5 to 180 seconds, and file intervals are 5 to 3600 seconds.

2.11.5.6 Save Image

When an event occurs, save the image of the selected channel. The image file is saved at "CCImage\SiteName_ChannelName" in a hard drive that is selected under "Options > Recording (tab)".



Available image file formats are BMP and Wavelet, and resolutions are QCIF, CIF, and Full(D1). Wavelet files are saved as eye files that can be viewed in web browser.

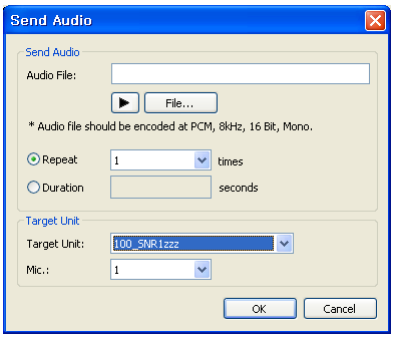
(Eye files can be converted to bmp or jpg files using a file converter program.)

Available frames are from 1 frame/5 seconds to 3 fps, and durations are from 1 to 180 seconds.

1 frame/5 seconds saves one image every 5 seconds, while 3fps saves 3 images every second.

2.11.5.7 Play Audio

When an event occurs, send the selected audio file to a selected unit.



To play audio from a selected unit, select an audio file and a duration or the Repeat option.

plays the audio file.

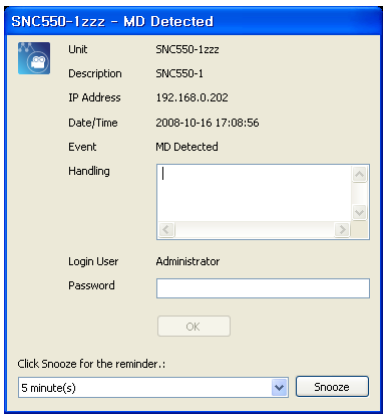
Supported audio file types are PCM 8kHz, 16Bit, and Mono. Audio files other than the listed types cannot be played.

2.11.5.8 Pop up thumbnail

When an event occurs, this activates a thumbnail for the event.

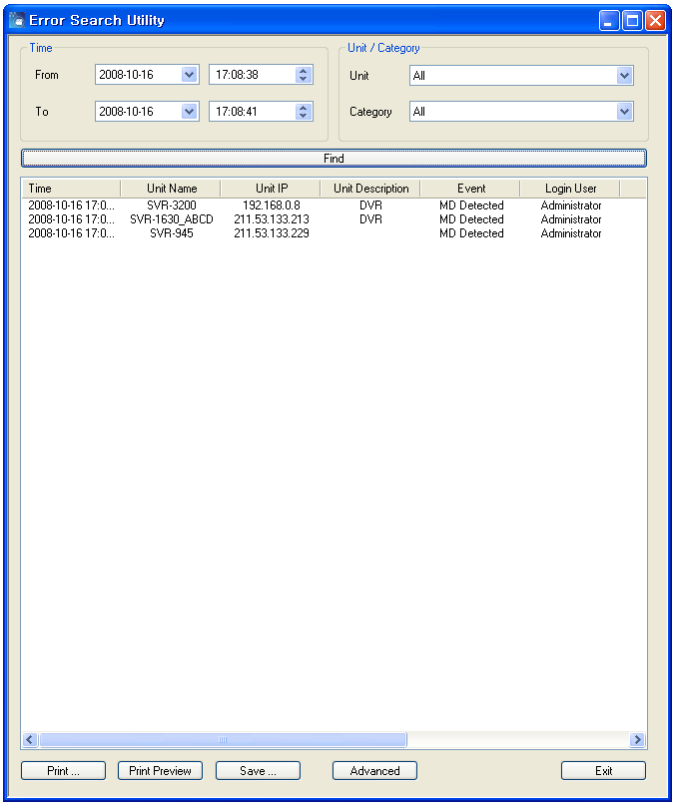
2.12 Searching Error Log

When a critical error occurs that requires the operator to take immediate action, or when the monitoring system cannot connect to a unit, or an HDD is broken, the following latch window appears asking to enter information for steps taken to correct the problem.



The operator must write a description of actions taken and then enter the password of his SNM-128P account.

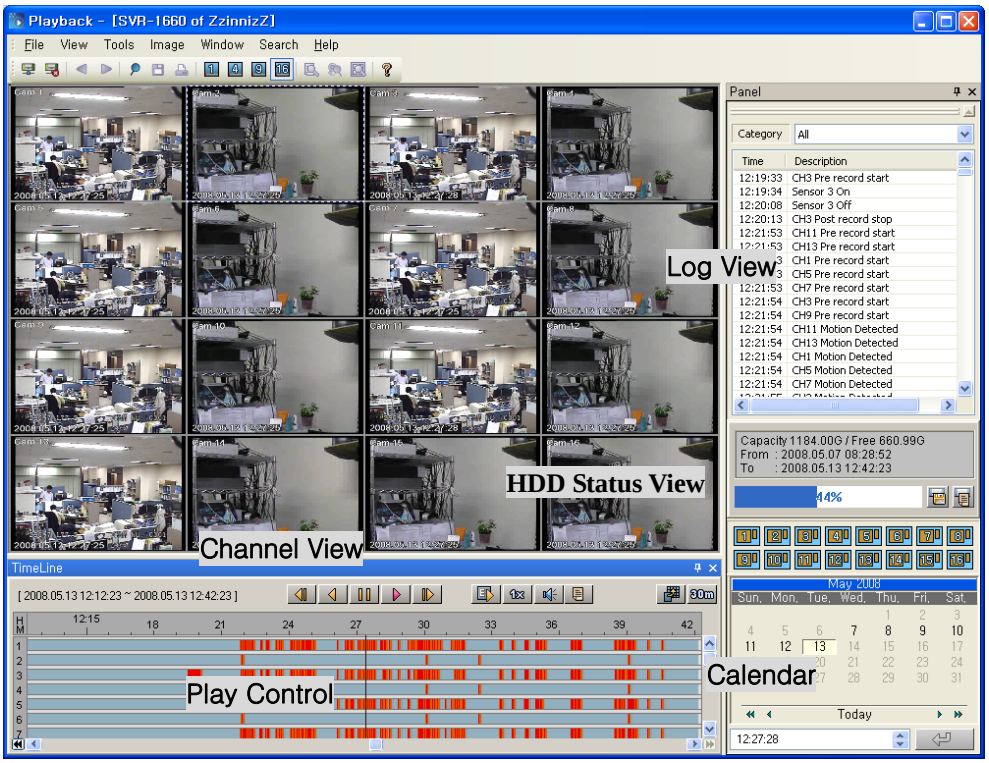
This information for errors is searchable through the Search Utility at Tools > Error.



Chapter 3. SNM-128P Playback

Enables you to search and view videos, audio, and text saved in units. To view, go to Tools > Search.

3.1 Interface



3.1.1 View Areas

3.1.1.1 Play Control

Contains features to control video playback, and displays the length of the video as a progress/seek bar.

3.1.1.1.1 Play Buttons

In order from left to right: move one frame backward, reverse playback, pause, play, move one frame forward.

3.1.1.1.2 Play Function Buttons

In order from left to right: play event only, accelerated playback, listen to audio, text list, show the timeline only for a selected channel, and time line interval.

3.1.1.2 Log View

Shows the log of a selected area by category.

To open Log View in a popup, double click on the Log View area. Closing the popup window restores the original Log View.

3.1.1.3 HDD Status View

Shows used and free space in the HDD of a selected unit along with the recording date and time.

3.1.1.4 Channel View

Allows you to play and watch the video of a selected channel.

3.1.1.5 Calendar

Click on dates to change the search period.

3.1.2 Toolbar

(Chart: Play Toolbar)

Button	Function
	Opens a file or unit.
	Disconnects from the current unit.
	You can split the Channel view screen into a number of channels for a selected unit, if the channels are more than the current number of split screens; this button is to undo the current split screens.
	You can split the Channel view screen into a number of channels for a selected unit, if the channels are more than the current number of split screens; this button is to redo a number of previous split screens.
	Displays a message window to adjust the screen.
	Saves the video of the currently selected monitor.
	Prints the video of the currently selected monitor.
~	Split the monitor screen into 1, 4, 9, or 16 screens; enables you to search a maximum of 16 channels.
	Searches text.
	Searches videos by motion.
	Searches thumbnails.
	Displays the software version.

3.2 Opening Unit & Backup File

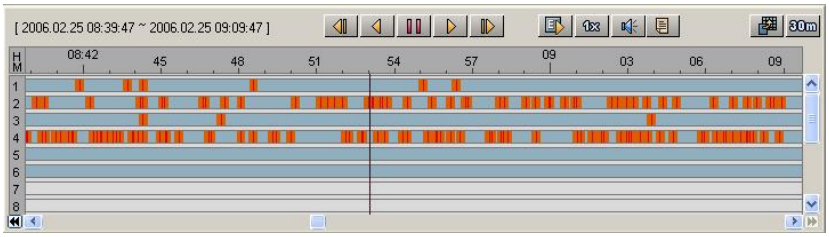
Click , or go to File > Open. My Unit tree appears, displaying only units that are equipped with hard disks. To search a unit, select a unit and then click "OK".

To search a backup file, click the "Open File" button and then select a file.

When a unit is opened for the first time, the program searches the data based on the latest date and time; the search timeline is automatically adjusted based on hours saved for the latest date. (For instance, if data was saved for 4 hours for the latest date, the program searches the data for a 6 hour duration.)

3.3 Search

3.3.1 Image Information Display



The image of each channel displays a different depth of color depending on the number of saved frames; the color becomes darker as the saving speed is higher. The red block indicates the image of events such as motion detection and sensor. The orange blocks before and after a red block indicate videos recorded before and after an event occurs. The bright lime green block indicates a text area.

Based on a 24 hour duration, the length of the bottom scroll bar changes depending on the length of a searched area.

3.3.2 Changing Search Timeline

To change the search timeline, click the button on the upper right side of Play View. There are 6 timeline length options available: 10 minutes, 30 minutes, 1 hour, 3 hours, 6 hours, 12 hours, and 24 hours.

3.3.3 Selecting Channels

A number of the channel buttons can be activated depending on the number of available channels per unit. To select a channel, click the corresponding button.

3.3.4 Calendar Search

You can pause a video, and move the search timeline to a specific date on the calendar. To move, click a date on the calendar, or enter a date and then click .

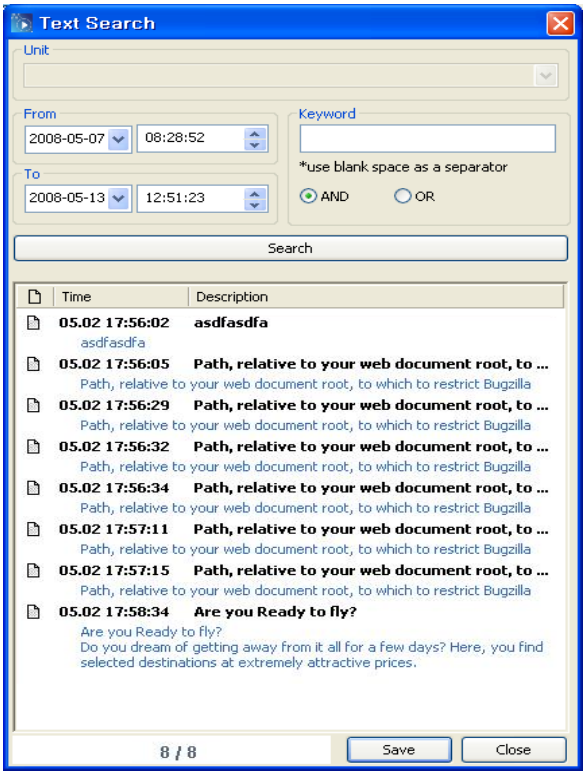
3.3.5 Log Information Display & Search

Log View displays the list of logs available within the current search timeline.

The log list includes logs available only in the currently searched channel, and can be sorted by category. To move to a specific hour, click on a corresponding log in the log list.

3.3.6 Searching Text

You can search text available in a specific timeline.


Text Search
Unit
From
2008-05-07
08:28:52
To
2008-05-13
12:51:23
Keyword
*use blank space as a separator
AND
OR
Search
Time
Description
05.02 17:56:02 asdfasdfa
asdfasdfa
05.02 17:56:05 Path, relative to your web document root, to ...
Path, relative to your web document root, to which to restrict Bugzilla
05.02 17:56:29 Path, relative to your web document root, to ...
Path, relative to your web document root, to which to restrict Bugzilla
05.02 17:56:32 Path, relative to your web document root, to ...
Path, relative to your web document root, to which to restrict Bugzilla
05.02 17:56:34 Path, relative to your web document root, to ...
Path, relative to your web document root, to which to restrict Bugzilla
05.02 17:57:11 Path, relative to your web document root, to ...
Path, relative to your web document root, to which to restrict Bugzilla
05.02 17:57:15 Path, relative to your web document root, to ...
Path, relative to your web document root, to which to restrict Bugzilla
05.02 17:58:34 Are you Ready to fly?
Are you Ready to fly?
Do you dream of getting away from it all for a few days? Here, you find selected destinations at extremely attractive prices.
8 / 8
Save
Close

The SNR-64B activates a combo box prompting you to select a unit to search.

Enter a timeline, keyword, and filter conditions, and then click "Search". Text search results are listed in the results section. While searching, a progress bar is displayed at the bottom of the

window. When finished, the window lists the results filtered by keyword.

Clicking "Save" saves the text search results as a text file.

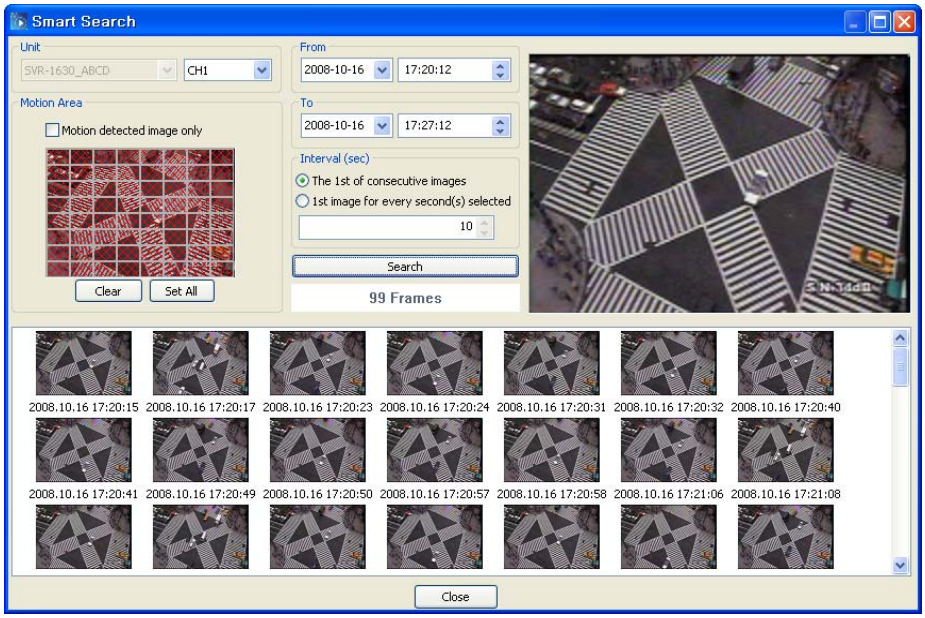
To move to a text area, double click on a search result.

While searching, other search features cannot be used: searching motion detection area, play video, or moving to a different point of time.

3.3.7 Smart Search

Enables you to search motion-detection videos within a specific timeline.

Only the SVR-3200/1680/1660/1645/960/945 models support this option.



The SNR-128B activates a combo box prompting you to select a unit to search.

Select a channel, area, timeline, and video interval, and then click "Search". Selecting "Search motion detection image only" searches only videos that have detected actual movement. (The Motion Detection option can be set up in the Setup program.) Selecting "Inspect All Images" searches all videos in a selected timeline that contain any motion detection results. Selecting "Inspect per Time Interval (Sec)" searches motion-detection videos for selected time intervals within a selected timeline.

When searched, snapshots of searched images are listed that show the beginning of a movement event. While searching, the progress bar is displayed at the bottom of the window. When finished, search result images are displayed.

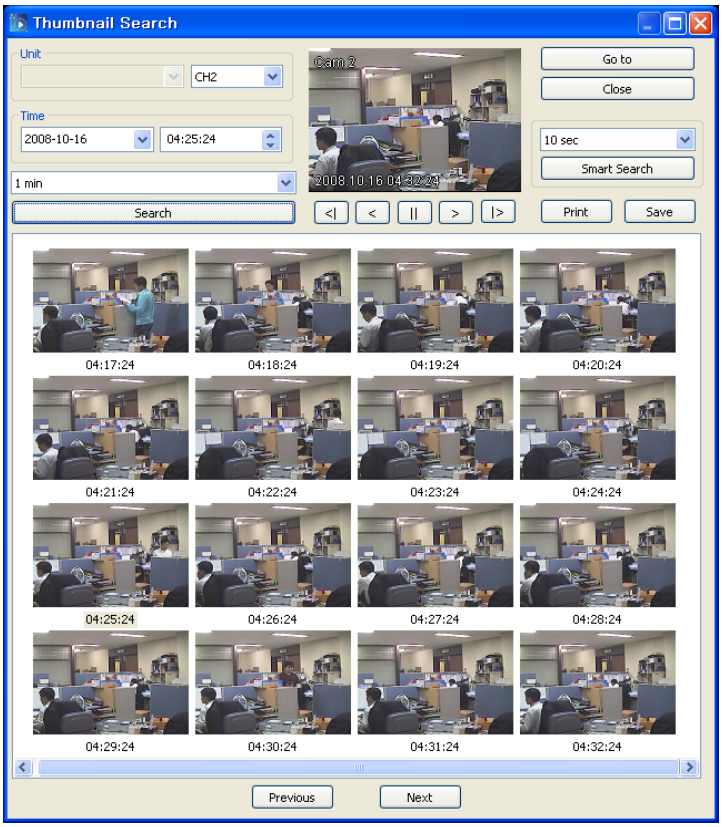
Clicking on a snapshot displays the actual image on the upper right side of the screen. Double clicking on a snapshot moves the play view to the point of time that the snap shot was taken.

While searching, other search features cannot be used: searching motion detection area, play video, or moving to a different point of time.

3.3.8 Searching Thumbnails

You can search thumbnails in a specific timeline by day, hour, minute, and second.

Only the SVR-3200/1680/1660/1645/960/945 models support this option.



The SNM-128P activates a combo box prompting you to select a unit to search.

Enter a channel and timeline, and then click "Search".

In the [Day] area, daily saved images are displayed based on the selected timeline.

In the [Hour] area, hourly saved images are displayed per day. At the bottom of the window, images saved every 10 minutes are displayed per hour. To adjust the time intervals of thumbnails, select an interval and then click "Search" in the combo box.

Double clicking on a thumbnail in the [Day] area searches thumbnails by the hour, minute, and second based on the date of the selected thumbnail. Double clicking on a thumbnail in the [Hour] area searches thumbnails by the minute and second based on the time of the selected thumbnail.

Clicking on a thumbnail moves the screen of Play View to the point in time that the thumbnail was taken.

To play the video of a thumbnail, click < (Reverse Playback), [](Pause), or > (Move Forward).

Clicking "Move" moves the Playback program to the point in time that the thumbnail was taken.

Clicking "Smart Search" opens the Smart Search window to search motion-detection videos based on the time of a selected thumbnail.

3.4 Playback

3.4.1 Playback Buttons

(Chart: Playback Buttons)

Button	Function
	Moves one image backward. (Only SVR-3200/1680/1660/1645/960/945 support this.)
	reverse playback.
	Pauses the current video.
	Moves forward.
	Moves one image forward. (Only SVR-3200/1680/1660/1645/960/945 support this.)
/	Toggle buttons; the first one plays the entire video, and the later one plays only event videos. (Only SVR-3200/1680/1660/1645/960/945 support this.)
~	Supported play speeds: 0.5x, 1x, 2x, 4x, 8x, 16x, 24x, 32x, 64x, and All. In the All mode, the entire video is played. These options are to play video at faster or slower speed, but actual speeds may vary depending on your network bandwidth and speed.
	Shows the video status of all or selected channels in a unit.

The Playback program may display the time of a video differently if the settings of the DVR and the SNM-128P are different.

3.4.2 Playing Audio

This option is available only when a video is playing forward at 1x speed. It plays the audio of all videos that are being played. To turn off audio, adjust the volume, or play only the audio of a selected channel, click . If audio is not available in some channels, the One Channel checkbox becomes disabled.

3.4.3 Text

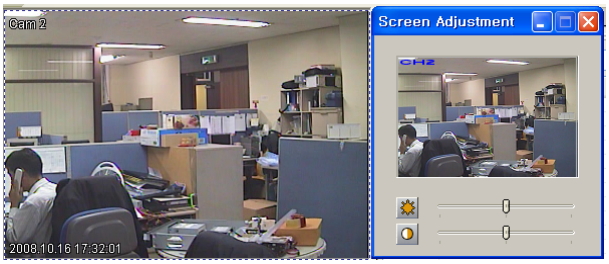
displays the Text window when clicked. It shows text received from the server. Only the SVR-3200/1680/1660/1645/960/945 models support this option.

Double clicking on text moves the Playback screen to the point in time that the text was entered. Clicking "Save" saves the current text as a text file.

3.5 Image Control

3.5.1 Zoom/Brightness/Contrast Control

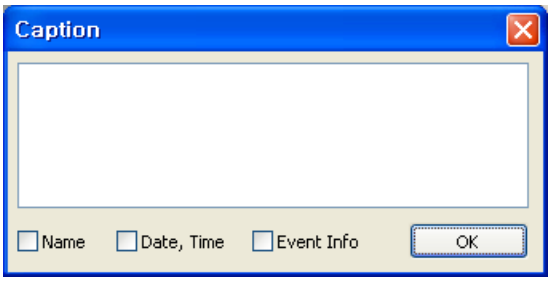
To open a message window to adjust the quality of images, go to Image > Screen Adjustment. To zoom in on a certain area, drag to select the area using the mouse.



adjusts the brightness, and the contrast. Clicking on the left button resets the current settings to their defaults. (Brightness: 1000, Contrast: 0)

You cannot change the quality of an image by pausing a video and then opening the Screen Adjustment window;
please first open the window, and then pause the video.

3.5.2 Saving Images



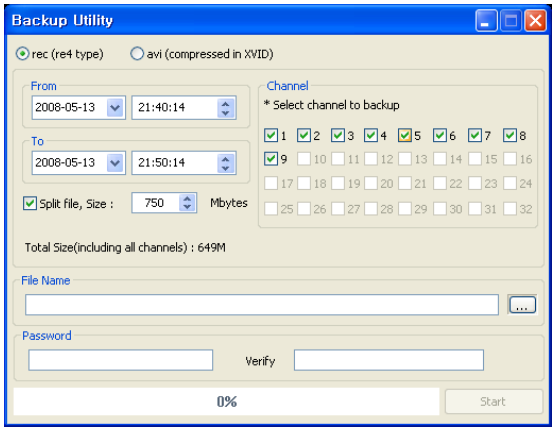
To open a message window to save the video of a selected monitor, go to Image > Save. Images are saved as bitmaps, including memos and captions.

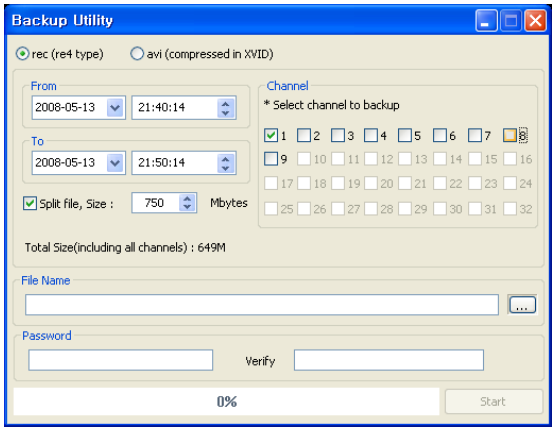
3.5.3 Printing Images

To print the image from a selected monitor along with a memo, go to Image > Print.

The standard printing size is A4.
A memo can contain a maximum of 7 lines with 45 characters per line.

3.6 Backup Feature





opens Backup Utility.

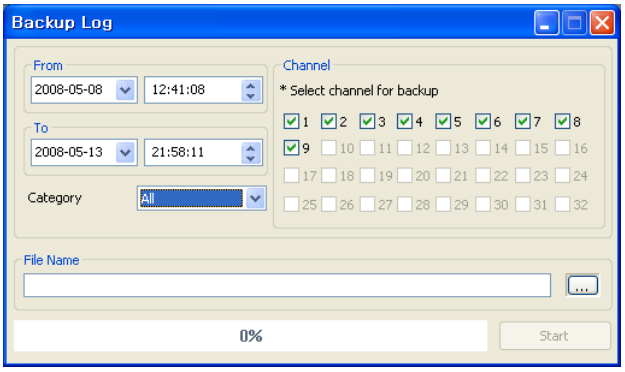
Available formats for backup files are rec and avi. When rec is selected, the left window is displayed, and the right window when avi is selected.

The re4 option enables you to back up all channels simultaneously while avi allows only one channel at a time.

You can back up files per unit. To back up, select necessary information including a timeline (date and time), channel, incremental file size, filename, and password, and then click "Start".

The password option is not available for avi backup.

3.7 Backup Log

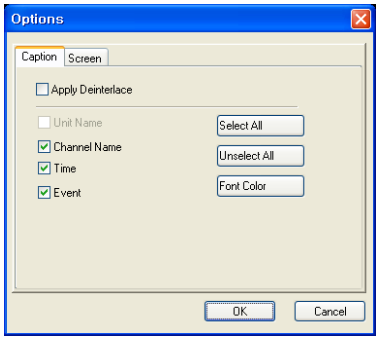


backs up only the text information of logs as an excel file.

To back up, enter the necessary information including a timeline (date and time), channel, and filename, and then click "Start".

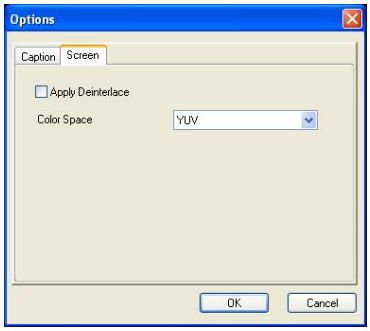
3.8 Setting Up Options

3.8.1 Captions



Hide or unhide Unit Name, Channel Name, Time, Event Caption in the Caption window. Unit Name is available only in the SNR-64B. You can also change the color of the caption font.

3.8.2 Spilt Screen Auto Control



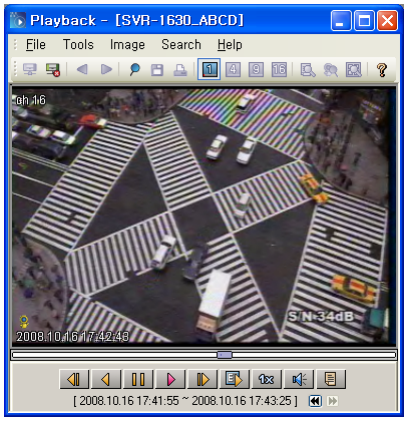
Under the Screen tab, a checkbox is provided to automatically split the monitor screen for several channels. A maximum of 16 split screens can be displayed simultaneously.

Checking on Deinterlacing applies the Deinterlace mode to all videos.

The supported color spaces are RGB and YUV.

3.9 Simple Mode Playback

The Playback program runs in Simple mode when it is opened from a map.



The length of the bar at the bottom of the Playback screen changes depending on the video length. To play video from a different channel recorded in the same timeline, drag and drop the channel from the map to the Playback window.

Chapter 4. SNM-128P Setup

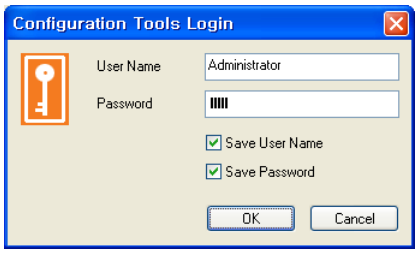
The images included in the following guideline may contain a number of channels and menus that differ depending on your product model.

This guideline applies only to the SVR-3200/1680/1660/1645/960/945/1630 models.

4.1 Program Login

(1) Click on the "SNM-128P Configuration Tool" icon on the desktop.

(2) Log in to the program.

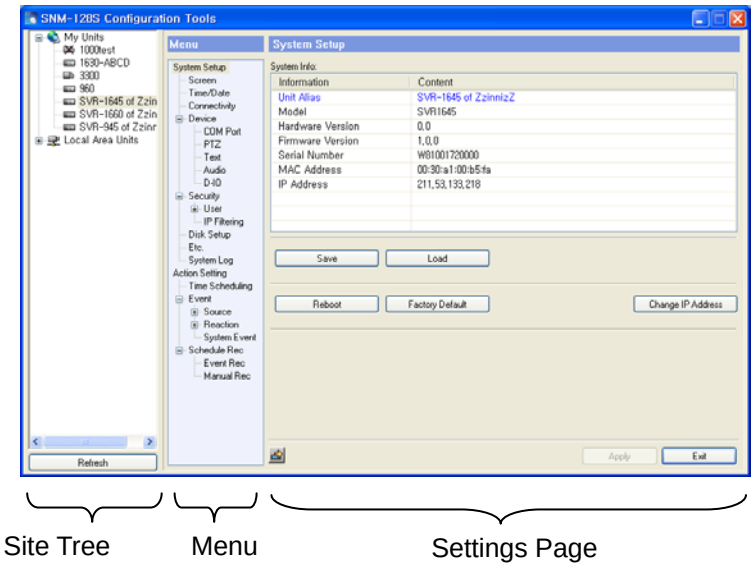


Enter your ID and password, and then click OK.

The SNM-128P Setup program runs if the ID and password match.

The default ID is "Administrator", and the default password is "12345".

4.2 Interface



The main Configuration Tools screen is as shown in the picture above, consisting of Site Tree, Menu, and the Settings page.

4.2.1 Site Tree

Units displayed in the site tree are the ones registered in My Unit in the SNM-128P Main View; they cannot be added, deleted, or edited in Configuration Tools.

The unit list is synchronized to My Unit in the SNM-128P Monitor program on a regular basis. To refresh the list immediately, click Refresh at the bottom of the window.

Clicking on a unit displays available settings menus in the Menu area and the system settings page in the Settings page.

4.2.2 Menu

Menus in the Menu window vary depending on the product model. Clicking on a menu displays the settings of the menu in the Settings page.

4.2.3 Settings Page

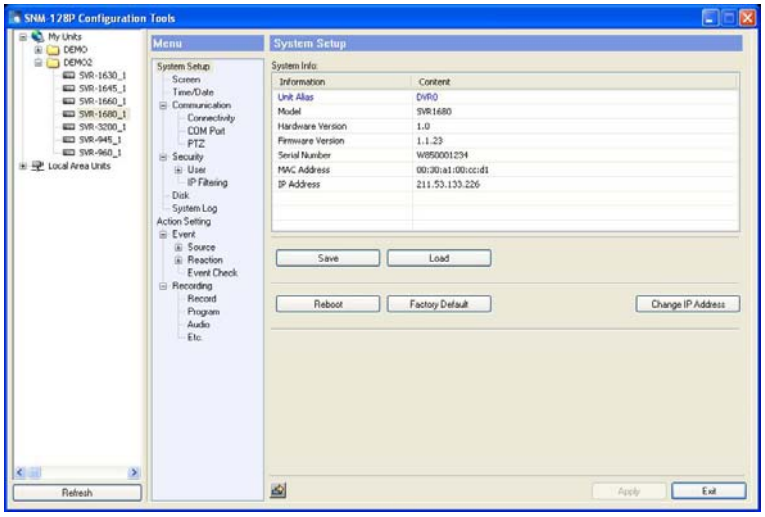
Changing settings parameters in the Settings page enables the "Apply" button at the bottom of the window. Make your changes and then click the button to apply the changes.

Please remember that any changes made in the Settings page will not be saved unless the "Apply" button is clicked.

If you do not click the "Apply" button and attempt to move to a different settings menu, a message window will prompt you to apply the changes before navigating away.

4.3 Setup Guidelines

4.3.1 System Setup



4.3.1.1 System Setup

Displays the system information of a DVR. The Unit Name is displayed in blue and can be double clicked to change it. To rename a unit, enter the new name and then click "Apply".

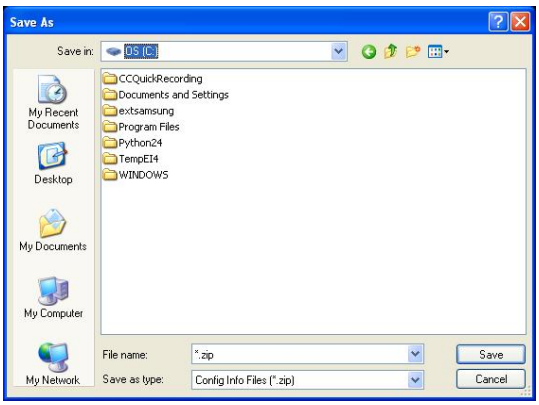
4.3.1.2 Importing & Exporting Settings

You can save all settings information for a DVR as a file (export settings), and apply the settings to other DVRs using the saved file (import settings).

This option is useful to apply the same settings to multiple DVRs, but can be used only if they are in the same product family and have the same firmware version.

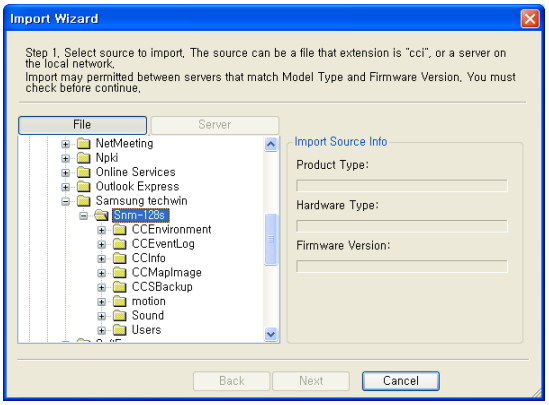
Only the SVR-3200/1680/1660/1645/960/945/1630 models support this option.

<Exporting Settings>

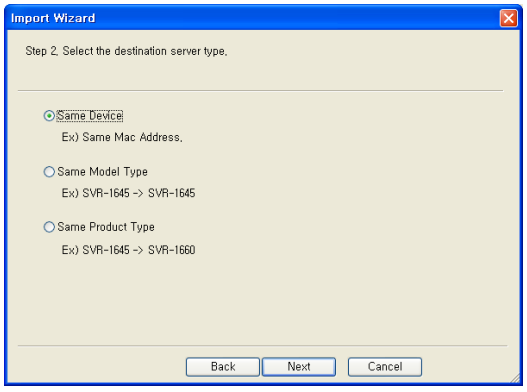


Clicking on "Export Settings" opens a window to save the settings information of a DVR as a file. Enter a name for the exported file.

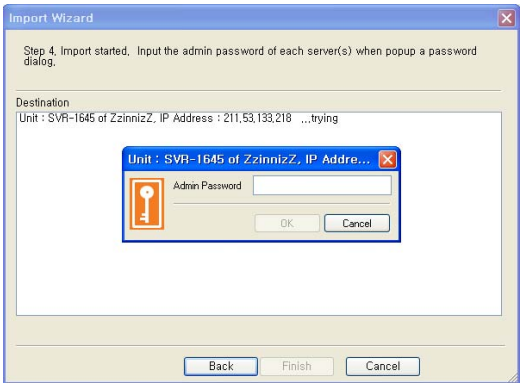
<Importing Settings>



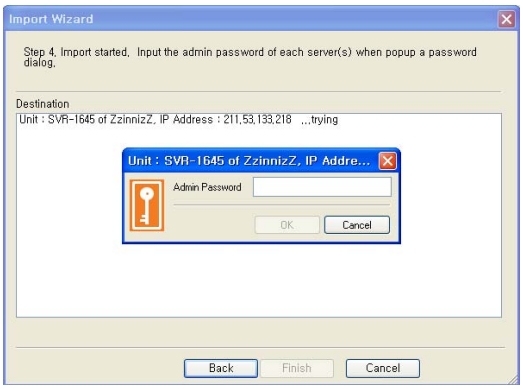
Clicking on "Import Settings" opens the Import Wizard window. In the file list, select an exported settings file saved as *.cci. The product type, hardware type, and firmware version of the selected file are displayed. Check the information, and then click "Next".



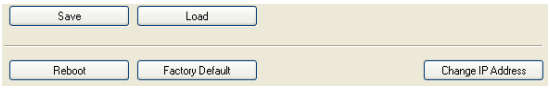
Set whether the export and import devices are the same, the same model, or in the same product range.



If they are the same device, the wizard program can import the settings immediately.
Enter your administrator password, and then click "OK" to import the settings.



When the settings are successfully imported, the "Completed" window appears, enabling the "Exit" button.



Restart

Restarts a DVR.

Reset Settings

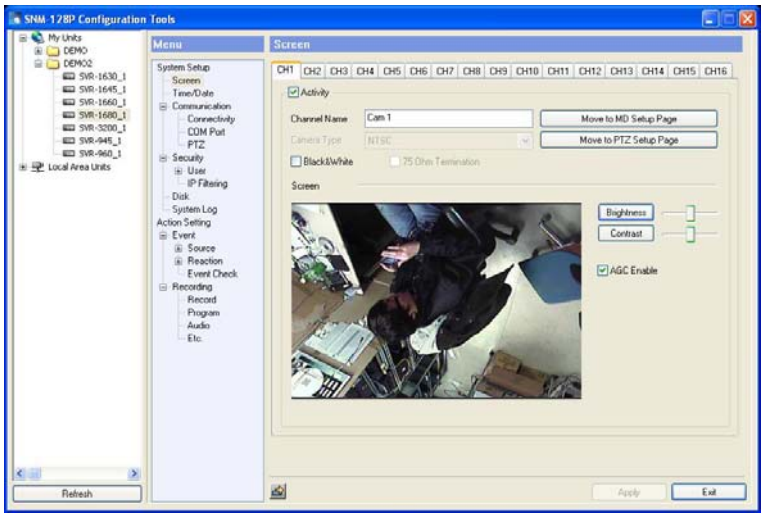
Resets the current settings to their factory defaults.

Change IP Address

Enables you to change the IP address of a DVR.

The Reset Settings option does not reset the date and time, network settings, or video types (NTSC/PAL) of the monitoring system.

4.3.2 Screen



4.3.2.1 Video Channel Setup

Allows you to change the basic information, screen brightness, and contrast of a video channel.

The number on each tab indicates a video channel number: CH1, CH2, CH3, CH4 … CH16.

4.3.2.2 Channel Information

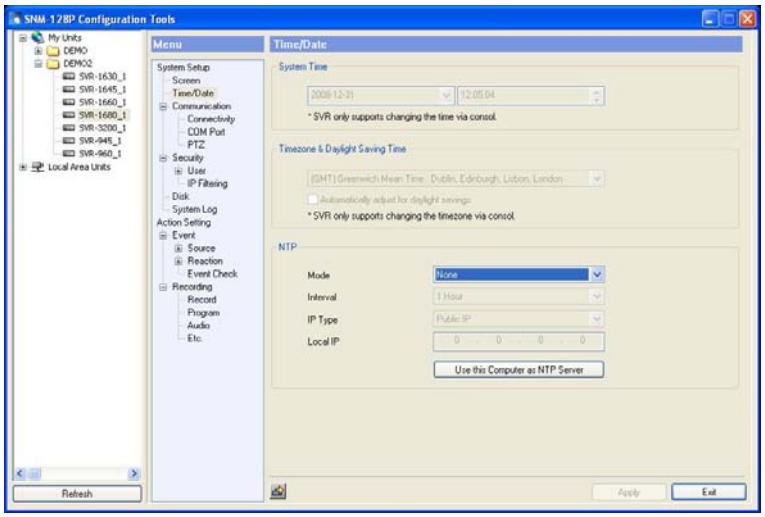
- Activate : Turns a channel on or off.
- Channel Name : Name a channel.
- Camera Type : Displays the video type; displays automatically. (NTSC/PAL)
- B/W Mode : Check if the video output is black and white.

4.3.2.3 Image Adjustment

Enables you to optimize the brightness, contrast, and AGC of images.

Clicking the Brightness or Contrast button resets the settings to the default.

4.3.3 Date/Time



4.3.3.1 Date/Time

System Time

Displays the date and time on a DVR. This can be changed only in the Local Unit menu.

Standard Time Zone & Daylight Saving Time

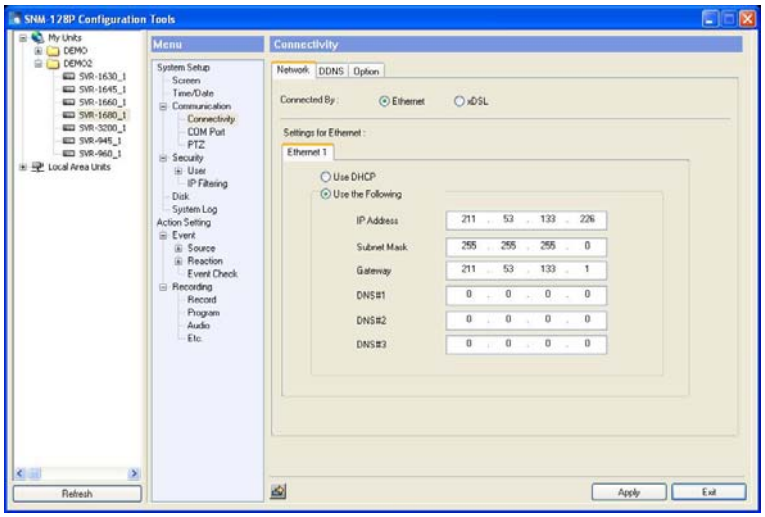
Displays the current time zone of a DVR. Selecting a daylight saving time zone opens a window to activate the DST option. When DST is turned on, the program applies the time settings in the same way as Microsoft Windows does.

4.3.3.2 NTP Setup

NTP (Network Time Protocol) enables you to synchronize the time of all devices on a network.

- Mode : Available modes are Server, User, and Bi-Support. When Server mode is selected, the DVR becomes the time server. When User mode is selected, the DVR receives the time information from a time server.
  When the Bi-Support mode is selected, the DVR performs as both the time server and a user.
- Refreshing Interval : Select an interval to receive the time information from the time server if the DVR is set to User mode.
  (Available Intervals: 1/3/6/12/24hr)
- IP Type : To receive the time information from an NTP server on the internet, select the public IP. To receive the time information from an NTP server within the same network, select the private IP.
- Private IP : If the selected IP type is Private, enter the IP address of the NTP server.

4.3.4 Network

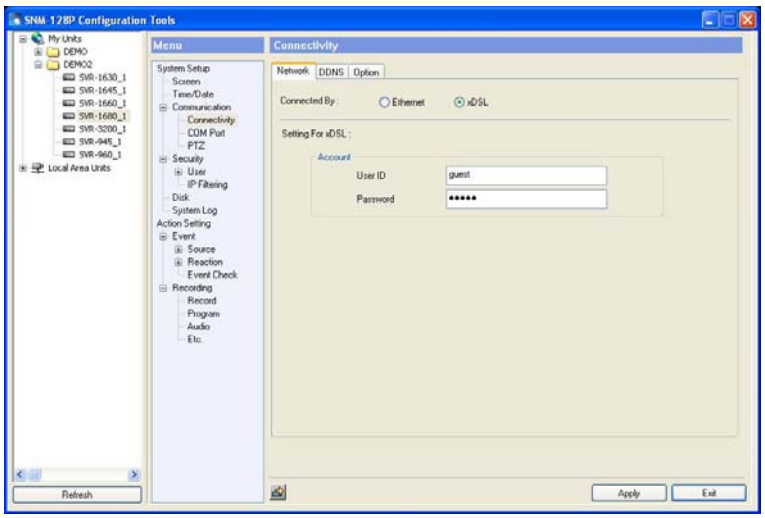


4.3.4.1 For Ethernet Networks

If using a dynamic IP, select "Use DHCP". If using a fixed IP, enter the IP address, subnet mask, gateway address, and DNS server for the unit.

For more information regarding fixed IP settings, please inquire with your network administrator or ISP.

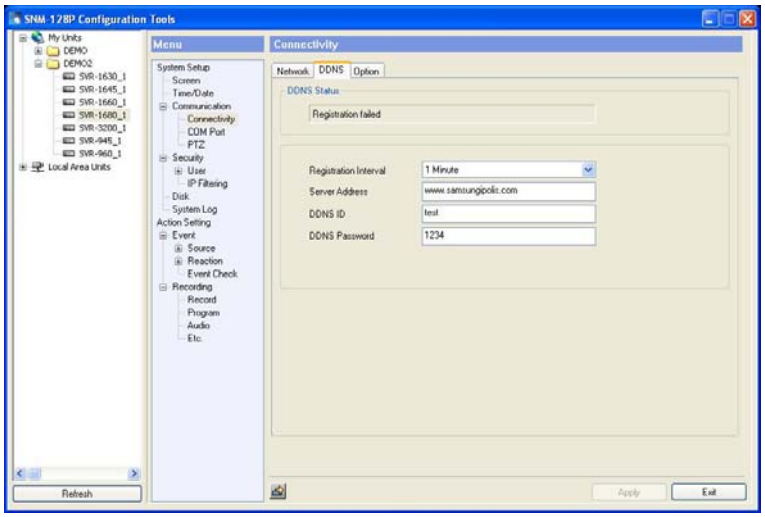
4.3.4.2 For xDSL Networks



If the network line is xDSL (ADSL, HDSL, VDSL, etc.), select xDSL and then set up an ID and password.

1. **Some xDSLs are ADSL, HDSL, and VDSL, and can be used if the protocol is PPPoE.**
2. **To set up an xDSL network, WRS must be set up at the same time, unless you use fixed IPs.**
3. **Changing the network settings to xDSL no longer enables the servers within the network to connect to ones in the Ethernet environment.**
4. **The user ID and password are the ones that you received from your xDSL provider.**
5. **If your network line is xDSL, but uses an auto connection modem, select Ethernet instead of xDSL.**

4.3.4.3 DDNS



If a DVR is connected to a network with a dynamic IP, you cannot check the IP address. To manage dynamic IPs for DVRs, you can register them with a DDNS Server under the DDNS tab.

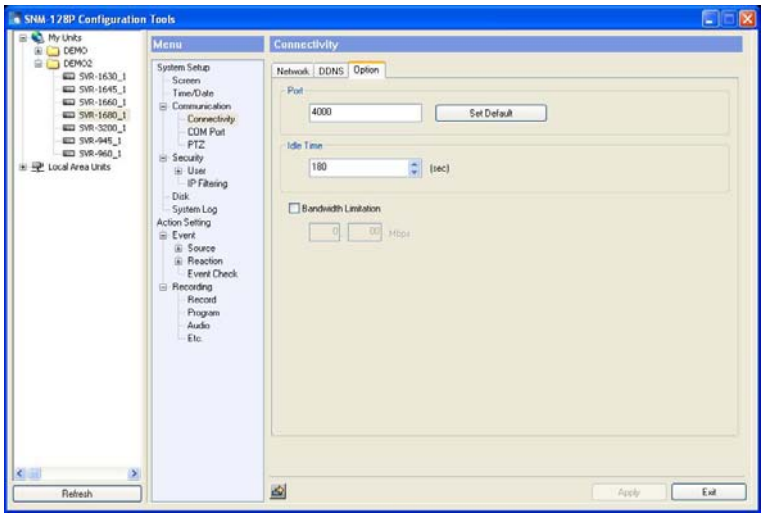
- Renewal Period : Set up a period to renew the SWR registration for dynamic IPs. Set the period to 1 minute if the IPs change very frequently. (Available Periods: Disable/1min/1hr/3hr/6hr/12hr/24hr)
- Server Address : Samsung Techwin's DDNS server address is at www.samsungipolis.com.
- DDNS ID : Enter ID registered to the DDNS server.
- DDNS Password : Enter password registered to the DDNS server.

Registering dynamic IPs to the DDNS server is useful in the following cases:

- When using DHCP for Ethernet

- When using xDSL (Fixed IPs excluded)

4.3.4.4 Setting Up Ports



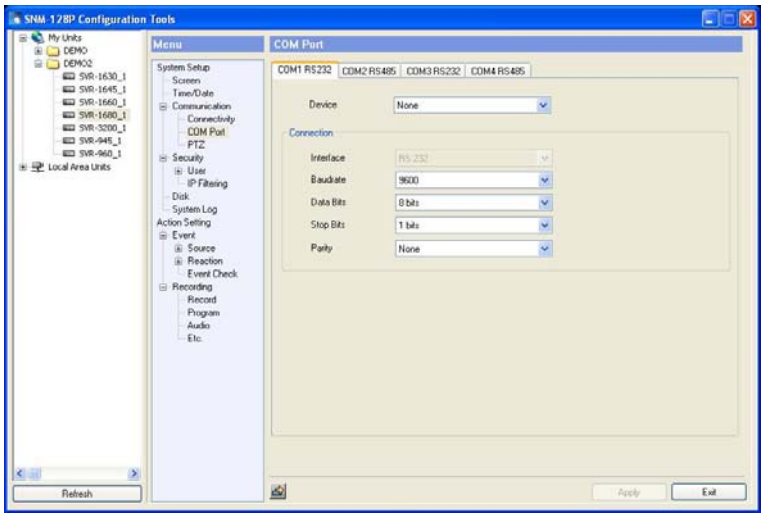
Port : Change a port number if you are unable to connect to a DVR due to various reasons such as firewall.

- Time Out Period : This option is to distinguish a client in an unstable network. If a connection between the DVR and a client is not established within a set time limit, the DVR forcibly closes the connection. The default period is 3 minutes. (Period Range: 0~3600sec)

- Bandwidth Throttling : When checked, the web viewer data transfer speed of the SNM-128P is throttled to the selected speed.

DVRs automatically connect to a new network when changed.

4.3.5 COM Port



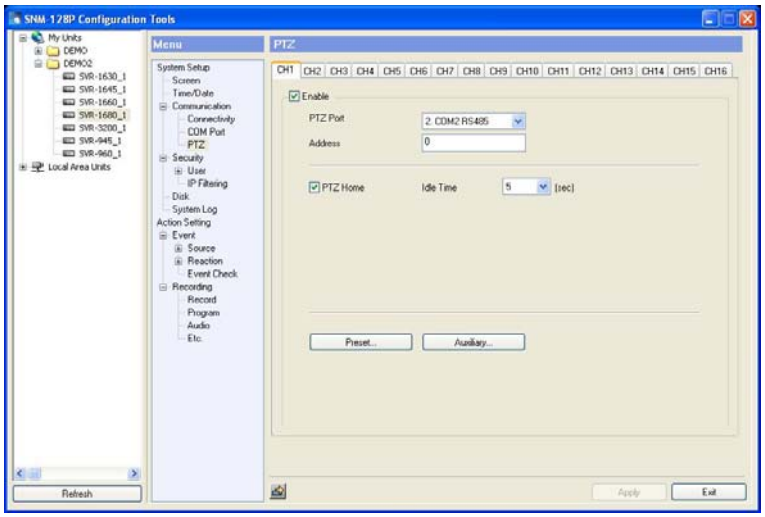
In the COM Port page, you can set up the settings and device of each COM port. The number of tabs changes according to the number of available COM Ports, and the name of each tab indicates the COM port number.

4.3.5.1 Selecting Device for Serial Port

Supported devices for serial ports are PTZ, TP, Keyboard, and Text.

- PTZ : Select to connect a PTZ. Selecting this menu opens the detailed settings at the bottom of the widow, allowing you to select an appropriate PTZ device. To move to the PTZ settings page directly, click "To Setup Screen".
- TP : Select to use a serial port for TP. This is used to pass serial data from a serial port to the network.
- Keyboard : Select to connect a keyboard. Selecting this menu opens the detailed settings at the bottom of the window, allowing you to select an appropriate keyboard.
- Text : Select to connect a text device. To move to the Text settings page, and click "Go".

4.3.6 PTZ



The label on each tab indicates a camera channel number. Select a channel to connect your PTZ.

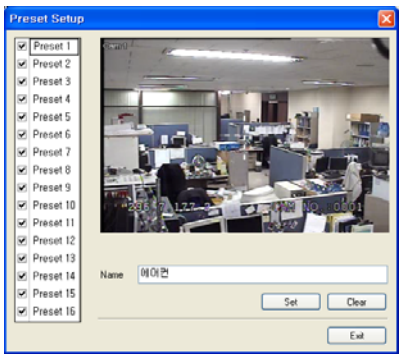
4.3.6.1 PTZ Setup

To use PTZ, you must select PTZ in the COM Port page.

- Activate : Check the box to connect the channel to the PTZ.
- PTZ Port : Select a serial port for the PTZ device.
- Address : Enter the address of the PTZ device. The PTZ device settings value is the address.
- PTZ Home Time Out Period : Set up a period to command the camera to move to a selected preset if no movement is detected for the period.

If a PTZ device is already connected, you must first set up the device under the "Channel" and "Device" tabs.

4.3.6.2 Setting Up Presets



Click "Preset" to open the Preset Settings window.

Recording & Deleting Presets

To record a preset, select a preset in the list and then move to a desired location in the video. Enter the preset name, and then click "Apply".

To delete a preset, select a preset in the list and then click "Reset".

1. To activate the PTZ operation, open the popup menu in the video screen and then select "PTZ".

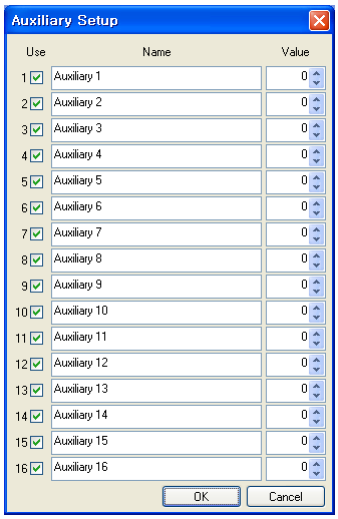
2. After activating the PTZ option, place the cursor in the video screen; a cross appears, enabling you to pan and tilt the camera.

3. To activate the Zoom or Focus menus, move the cursor to the left or right edge of the video screen.

Using Presets

To activate and use a recorded preset, check a preset in the preset list.

4.3.6.3 Auxiliary Functions

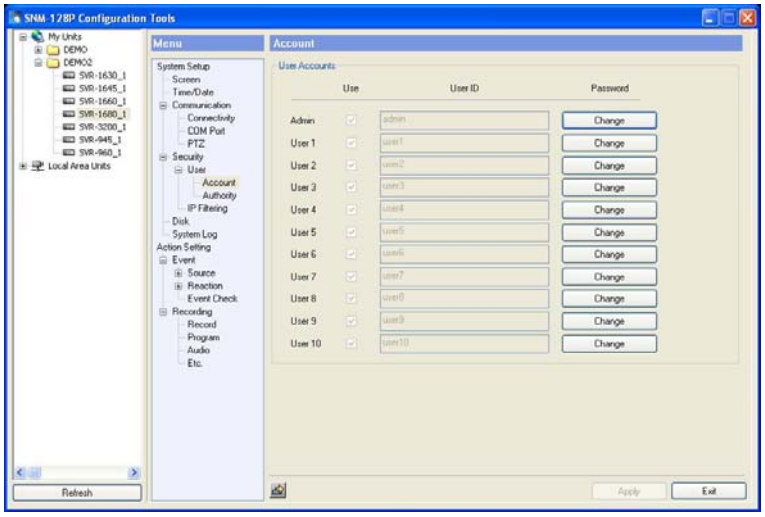


PTZ Devices offer a variety of auxiliary functions (e.g.: wiper control when equipped with a wiper, or light control when equipped with a light) aside from their basic functions: Pan/Tilt/Zoom.

To use the auxiliary functions, click the "Auxiliary" button and open a window that contains 16 auxiliary function boxes. Set up the auxiliary functions, and then click "PTZ" > "Auxiliary Function" in the screen popup menu to use them.

4.3.7 Users

4.3.7.1 Account



DVR users are divided into administrators and general users. Administrators can use all DVR features without any limitations. The maximum number of users is 10. They can only use features that they have permissions for.

Administrator Password

The default administrator password is "11111111" and can be changed. To change, enter an 8-digit password.

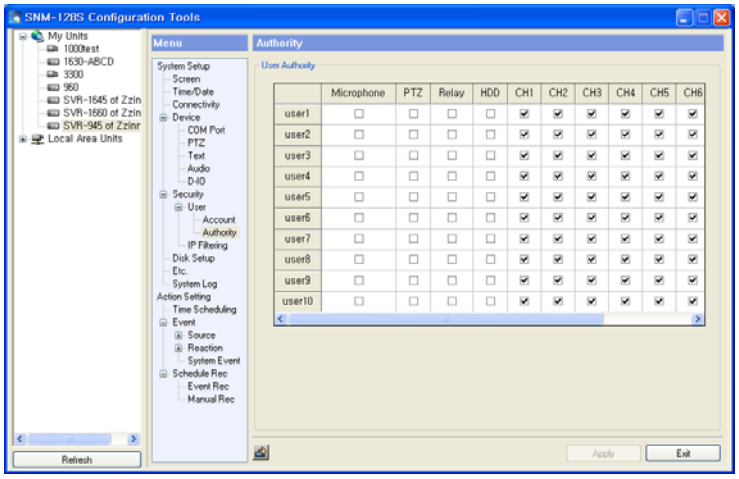
User Password

The default password for each user account is as follows: user1 is "11111111", user2 "22222222", and similarly on up to user10 with “00000000”.

Changing Passwords

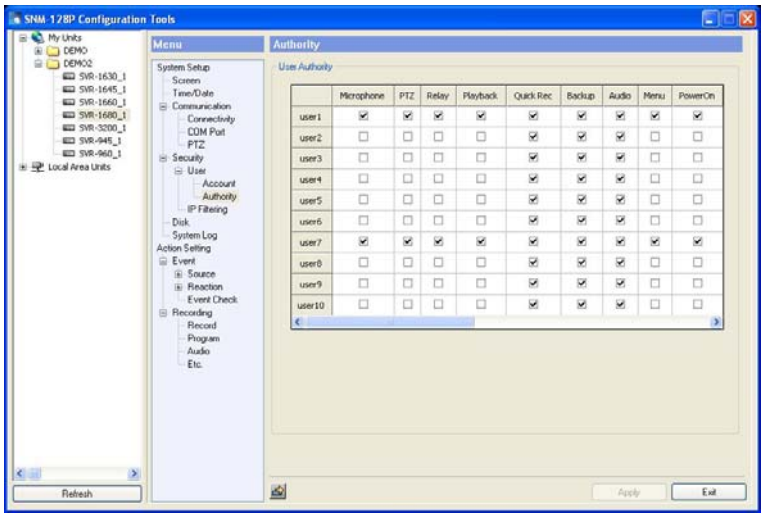
As shown in the image below, click Change P/W for a user you want to change.

4.3.7.2 Permissions



Normal user permissions are Mic, PTZ, Relay, Search, Quick Save, Back Up, Play Audio, Menu, Power On/Off, View Video by Channel. The default user accounts—user1, user2, on up to user10—have permissions only to view video by channel, quick save, back up, and play audio.

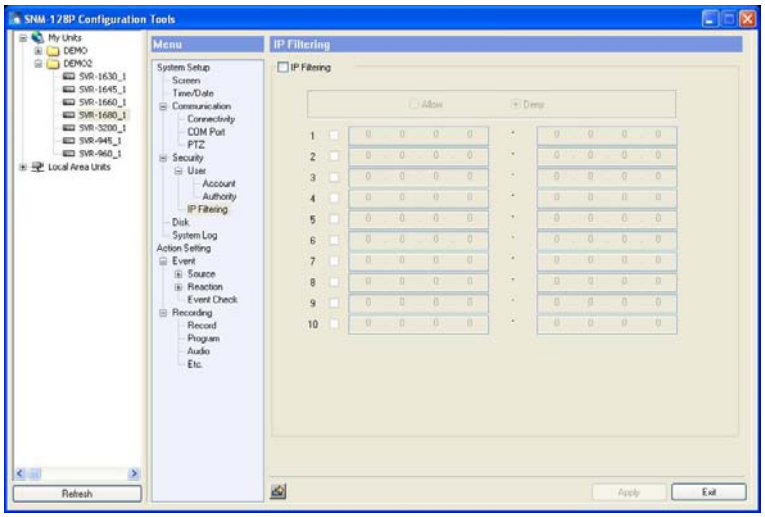
4.3.8 IP Filtering



This IP filtering lets you to allow or deny access to DVRs for specified IP address ranges.

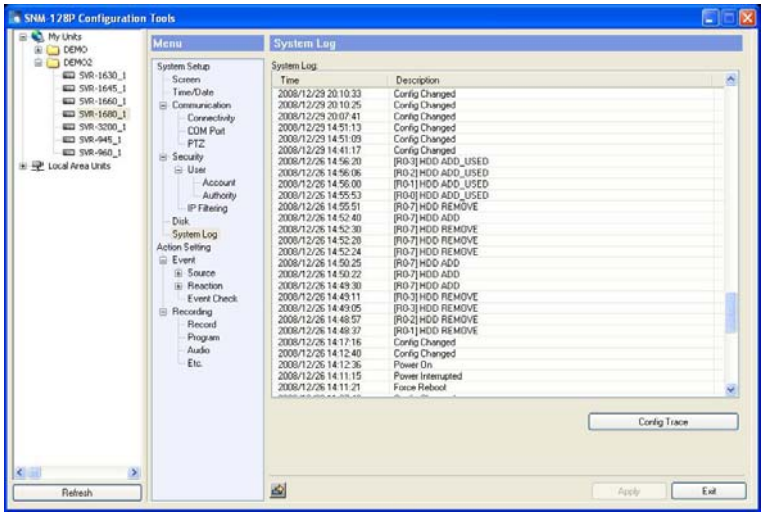
When Allow is selected, only the IP ranges added in the list are allowed to access the DVRs. When Deny is selected, IPs other than the ranges of IPs added in the list are allowed to access the DVRs. A maximum of 10 ranges of IP addresses can be added.

4.3.9 Disk



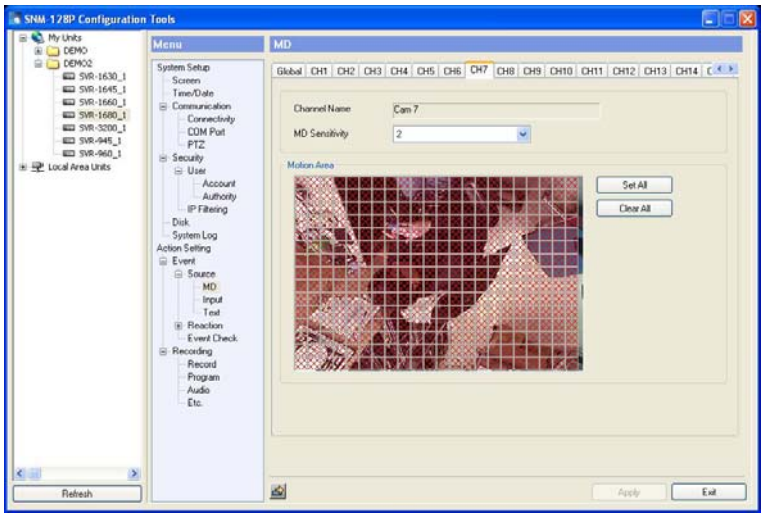
Displays the total and free space of a recording HDD in a selected DVR.

4.3.10 System Log



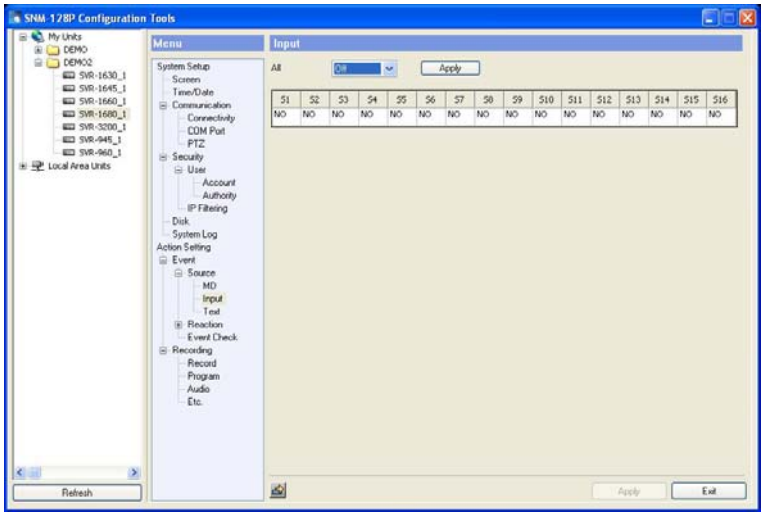
Saves and contains system logs.

4.3.11 MD



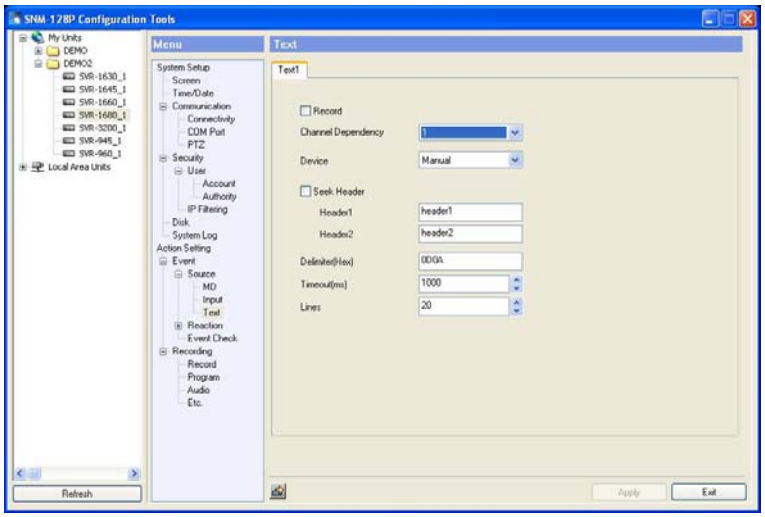
Enables you to activate Motion Detection for each camera channel. Select a motion detection sensitivity level in MD Sensitivity. Selecting None disables Motion Detection for the selected channel. A higher number indicates a higher sensitivity for Motion Detection.

4.3.12 Sensor Setup



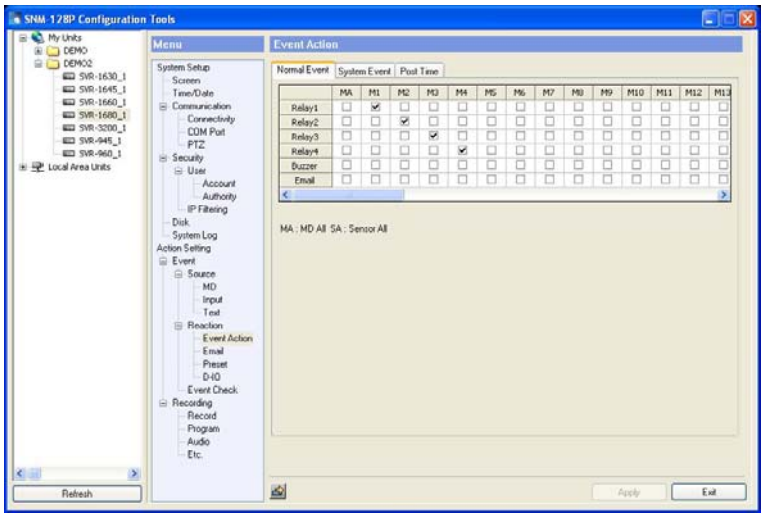
Select sensor types; a maximum of 16 sensors are supported. (NC: Normal Close, NO: Normal Open, Off)

4.3.13 Text



Check on the Save box, and then select a connected channel. If the connected device is Star Finger 007, select Star Finger 007. For other devices, select Manual and then continue the set up below.

4.3.14 Event Action



One DVR provides 4 relays, 1 buzzer, and 1 e-mail, and can carry out various events such as Input Sensor or Motion Detection.

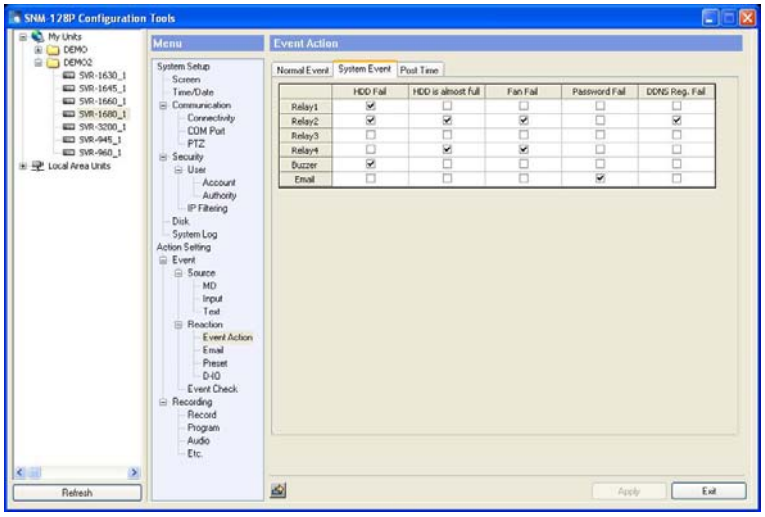
- Select Object : Select an object of a selected source.
- Select Source : Select an event source to activate a selected relay, Motion Detection, Sensor, Text, etc.

1. To set up a timeline, go the "Time Scheduling" page.

2. Exclusive timelines can be selected (up to 4) in the "Time Scheduling" page.

3. The operator can control the relay action of DVRs at any time, regardless of the relay settings.

4.3.15 System Event



<System Alert>

Check on event options to activate them when system errors occur.

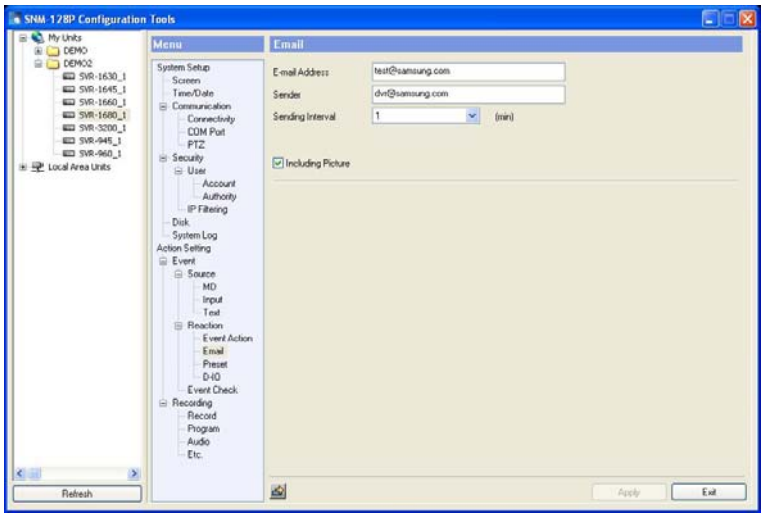
- HDD Error : Activates an event if the recording HDD or a selected unit is suddenly disconnected or causes an error.
- HDD Full : Activates an event if the recording HDD of a selected unit is full.
- Fan Error : Activates an event if the fan of a selected DVR unit suddenly stops operating.
- Incorrect Password : Activates an event if a user or administrator password does not match with the ID.
- DDNS Authorization Failure : Activates an event if a selected unit has failed to be registered to the DDNS server.

<Alert Type>

Turn on or off the Alert option for system errors.

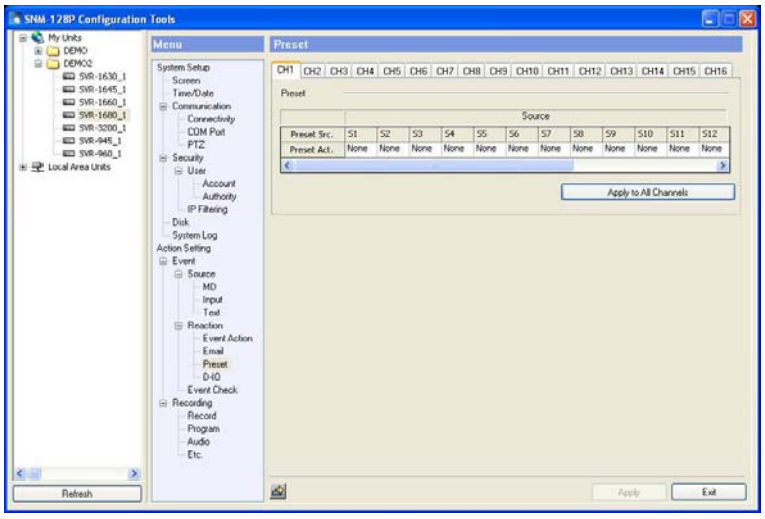
- Beep : Plays a beep when system errors occur.
- Send E-Mail : Sends an e-mail to report system errors on a regular basis.
- Relay On : Activates a relay when a system error occurs.

4.3.16 E-Mail



- E-Mail Address : Enter the e-mail address of an event alert recipient.
- Sender : Enter the e-mail address of an event alert sender; it must be an e-mail address: xxx@xxxx.xxx.
- Delivery Interval : The e-mail alert feature sends e-mails not when system errors occurs, but at scheduled intervals. Intervals must be from 1 to 30 minutes.

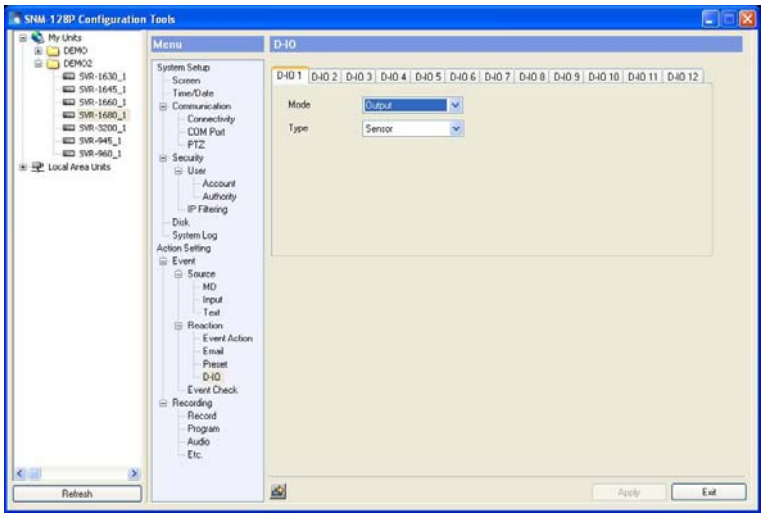
4.3.17 Event Preset



Select presets to perform MD (Motion Detection), Sensor, and Text events.

Presets can be set up per channel.

4.3.18 Digital Input & Output

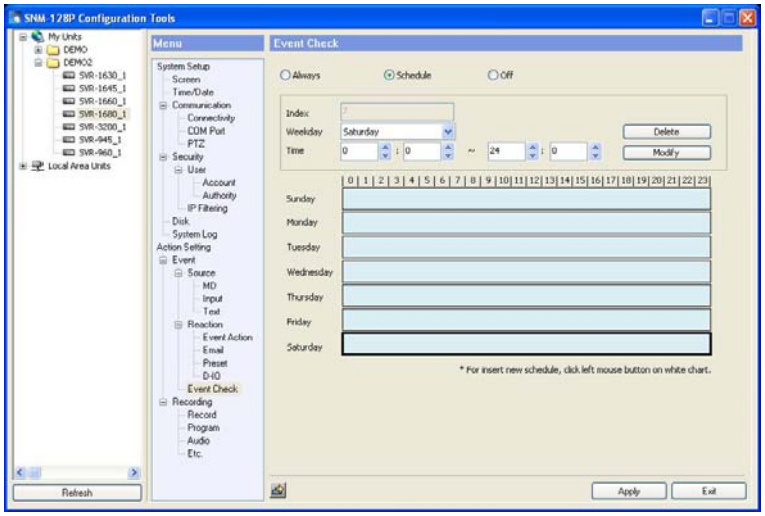


Digital I/O are digital ports available for input and output at the same time. There are 12 digital inputs and outputs.

Digital I/O Channel & Input/Output

All 12 channels can be set to input/output. When channels are set to input, if an input signal is received by even one channel, emergency recording will operate. When they are set to output, if sensor input is received, it will operate.

4.3.19 Event Schedule

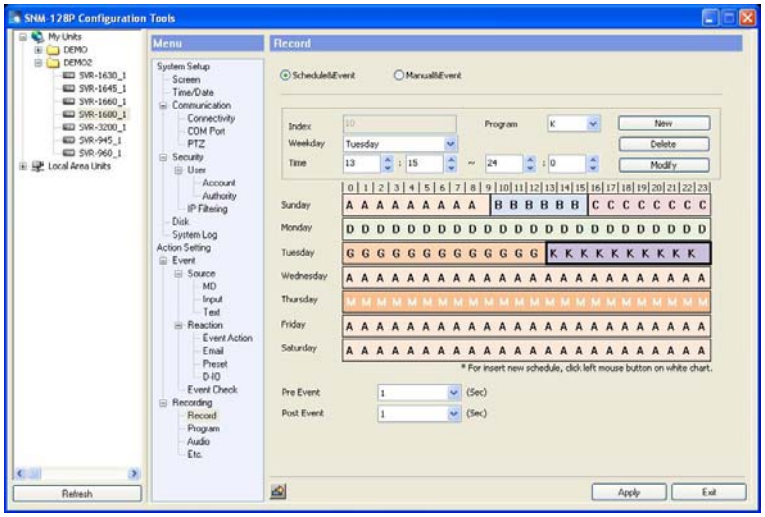


This sets times for event recording and has the options of Always, Disable and Timezone. The "Always" option always detects events while the "Timezone" option uses events only for specified hours.

When Timezone is selected, a setup similar to Schedule Setup is possible, and the event check time can be set by the hour.

4.3.20 Save

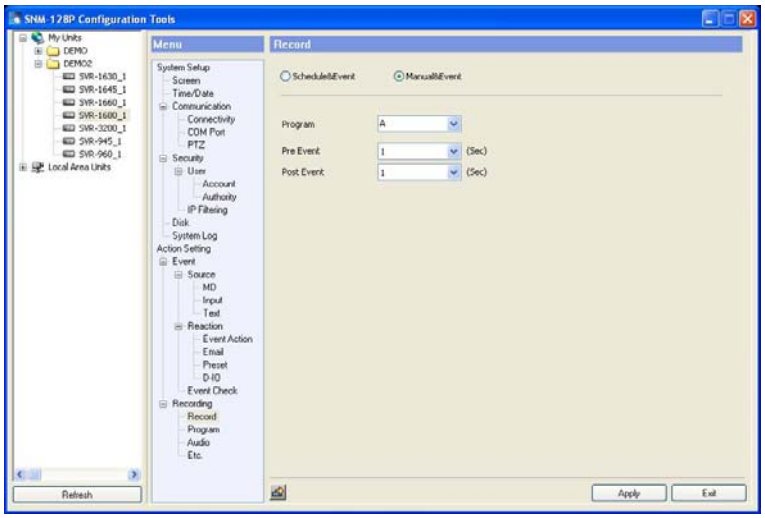
4.3.20.1 Schedule & Event



The Schedule & Event settings are to record videos based on the selected schedule and events. Schedules can be set by date and time, while programs should be set before schedule setup. Programs can be set from A to Z.

Event recording is divided into recording by sensor, by motion detection, by text and by digital input.

4.3.20.2 Manual & Event



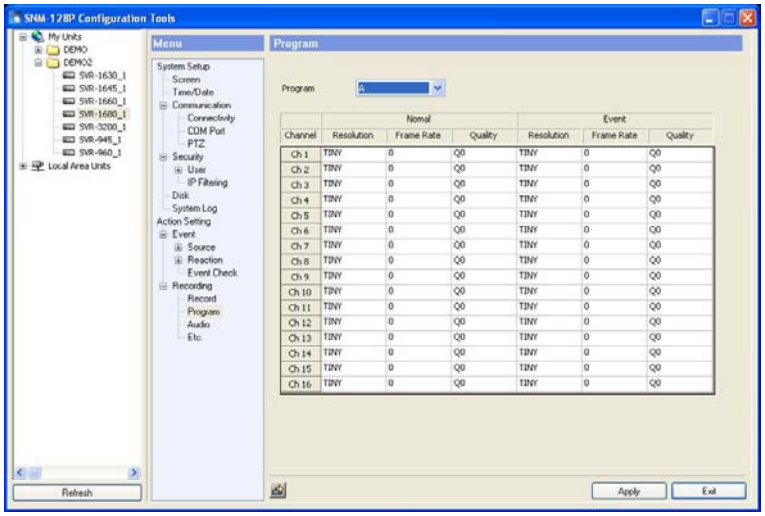
The Manual & Event settings are to record videos when the [REC] button is pressed and when events occur.

Programs can be set from A to Z, including pre- and post-events.

- Pre-event : Can be set up to 5 seconds.

- Post-event : Can be set up to 60 seconds.

4.3.21 Program



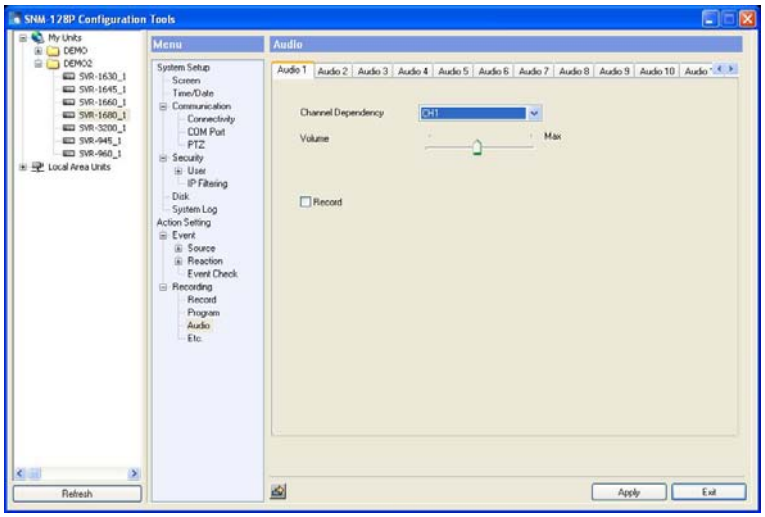
Programs can be set from A to Z, enabling you to select the image resolution, frame rate, and quality for channels under each program.

- Resolution : CIF, HALF, and D1 are supported.

- Frame Rate : NTSC (0~30) and PAL (0~25) are supported.

- Quality : Q1 to Q5 are supported.

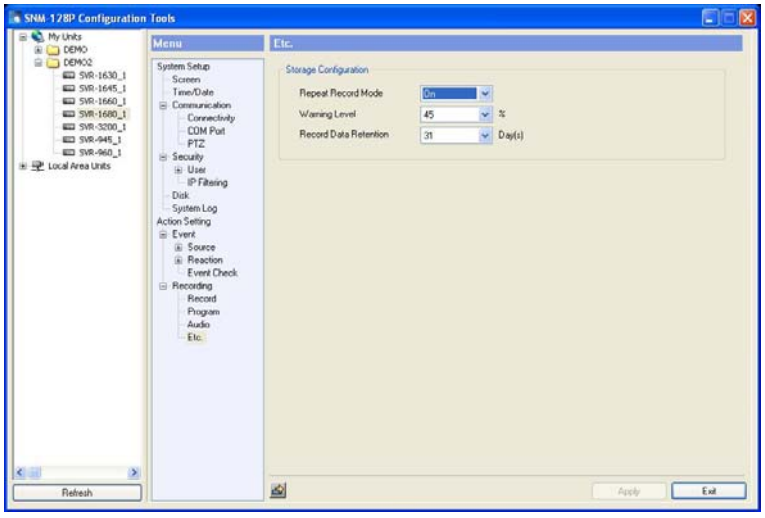
4.3.22 Audio



A DVR can support from 1 to 16 audio channels depending on the model, and can be connected to any channel to play audio along with video.

- Channel : Select a channel to connect audio.
- Audio Volume : Adjust the volume.
- Save : Check to record audio.

4.3.23 Miscellaneous

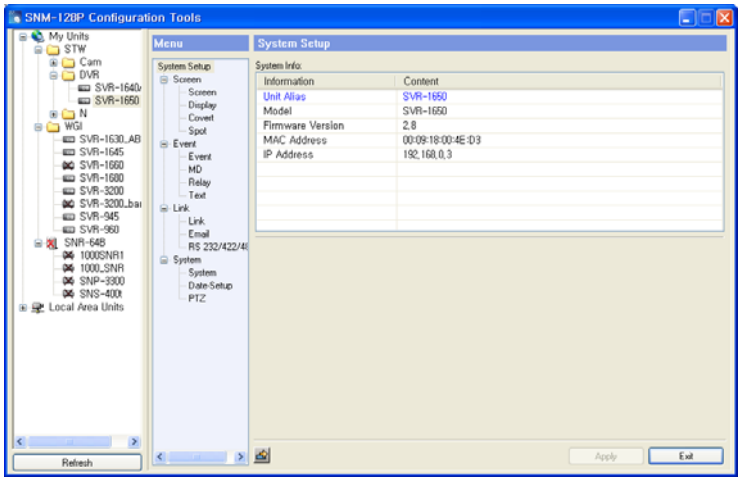


Enables you to set up the Repeat Record Mode, Alert Level, and Recorded Data Retention option.

- Repeat Record Mode : Automatically deletes recorded data from the HDD of a selected unit.
- Alert Level : Displays an alert message when the used space in the HDD of a selected unit reaches a set percentage.
- Recorded Data Retention : Limits an available period to watch videos recorded in the HDD of a unit.

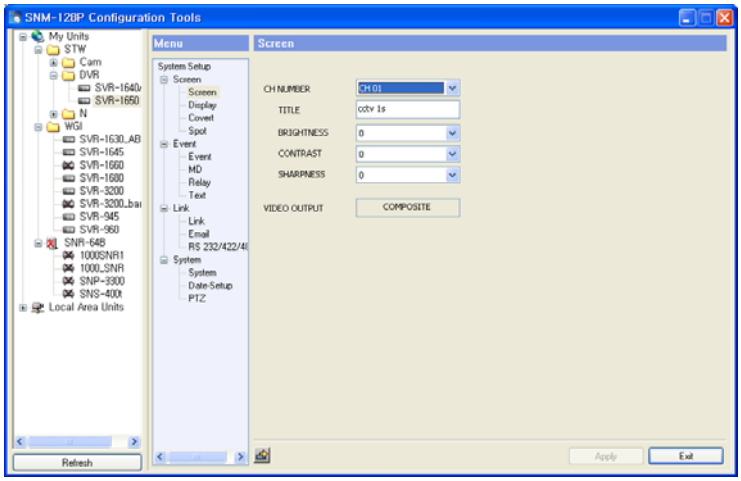
4.3.24 SVR-1650/1640/950 Setup

This setup guideline is only for the SVR-1650/1640/950 model DVRs.



The picture above is the initial screen of the Setup program when connecting to an existing DVR.

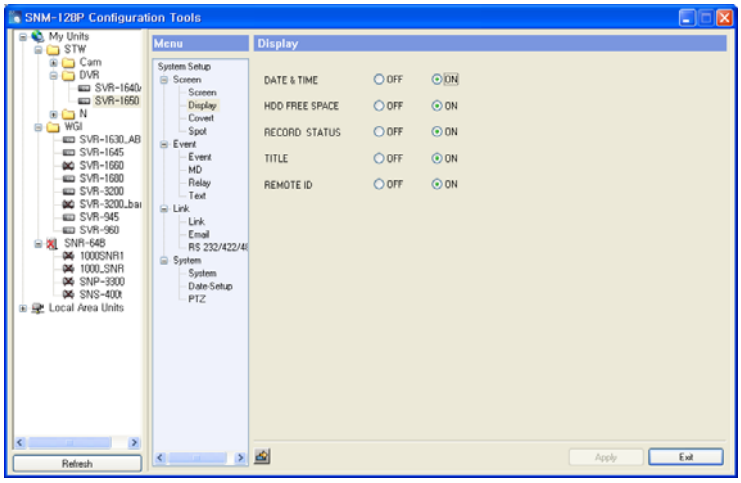
4.3.24.1 Screen



In the Screen page, you can select the name and the image brightness, contrast, and clarity of a channel.

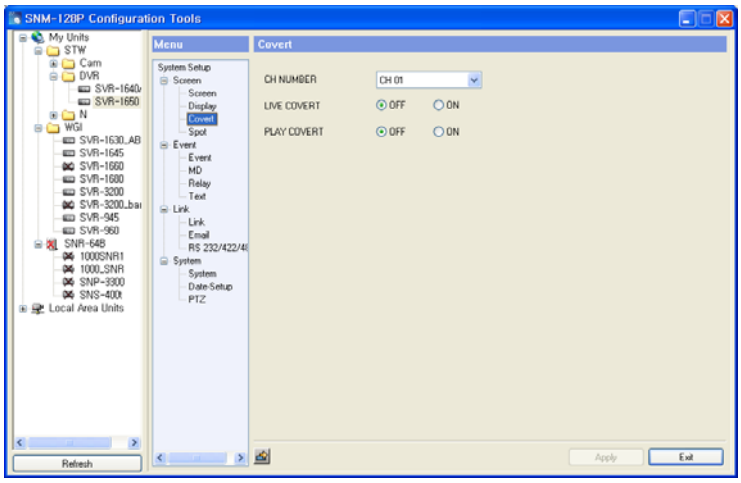
Both Korean and English can be typed in the Title box.

4.3.24.2 Display



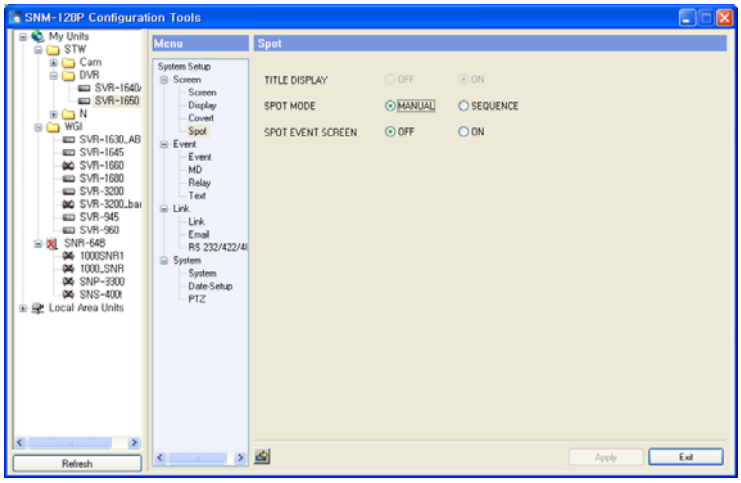
Select the types of information to display in the console monitor (hide or show information). Available information types are Date & Time, HDD Free Space, Saved Status, Title, and Remote ID.

4.3.24.3 Conversion



Hide or show video on the console monitor. Selecting Channel 2 and checking "Off" in the Hide Live Video option hides the video of Channel 2 from the console live monitor. To unhide the video, check "On" in the Hide Live Video option. The Hide Search option is to hide or show a video while it is being played. Checking "Off" hides the video while playing, and "On" shows the video.

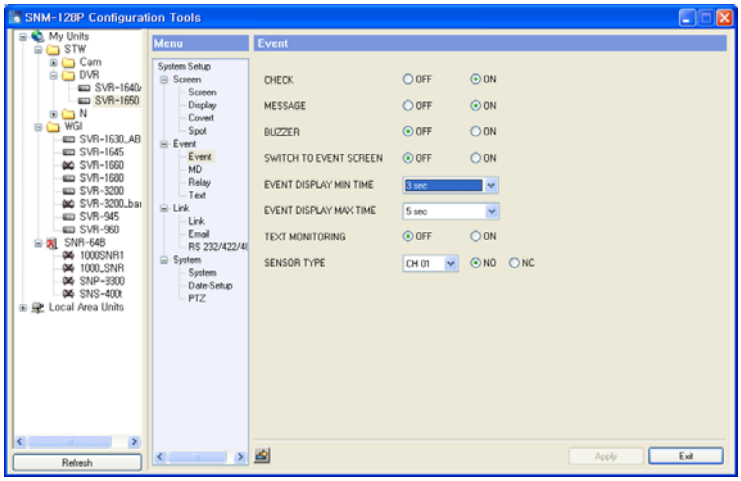
4.3.24.4 Spot



Select a type of Spot Mode and turn on or off the spot event popup screen. When checking Manual in the Spot Mode option, you can select a channel by activating Spot Mode under the Function menu in the console monitor. When checking on Orderly Conversion. Spot Mode is activated in channels of a DVR in an orderly manner.

Spot Event Screen can be turned off or on. When checking "On," an event popup window appears in the spot monitor upon an event occurrence. When checking Off, the popup window is disabled.

4.3.24.5 Event

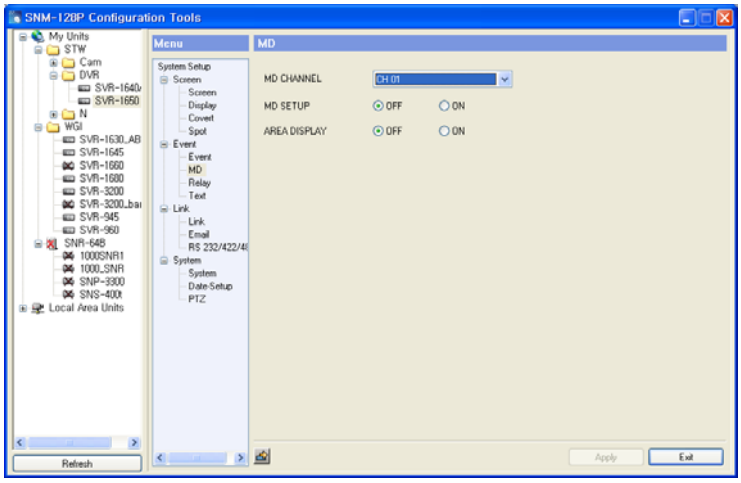


Hide or show event display options. Check or uncheck event occurrence, display or disable the alert message, play or disable the alarm, or switch to and from the event screen.

You can also set up a maximum duration for the event alert option, and display or hide text in the console monitor.

For Sensor, you can select only the type between NO and NC.

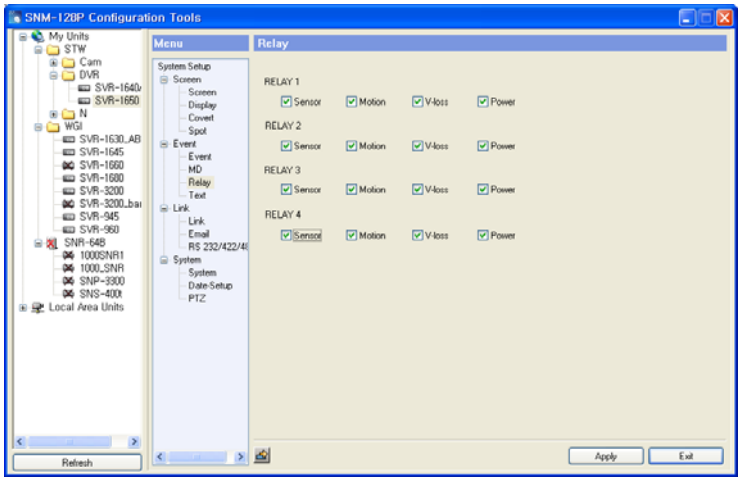
4.3.24.6 MD



Turn on or off the MD option, and hide or show the MD area.

The MD Settings option applies to each channel. Checking "On" activates the MD option for all channels. The MD area highlights the location of detected movement. Checking "On" activates the MD area display.

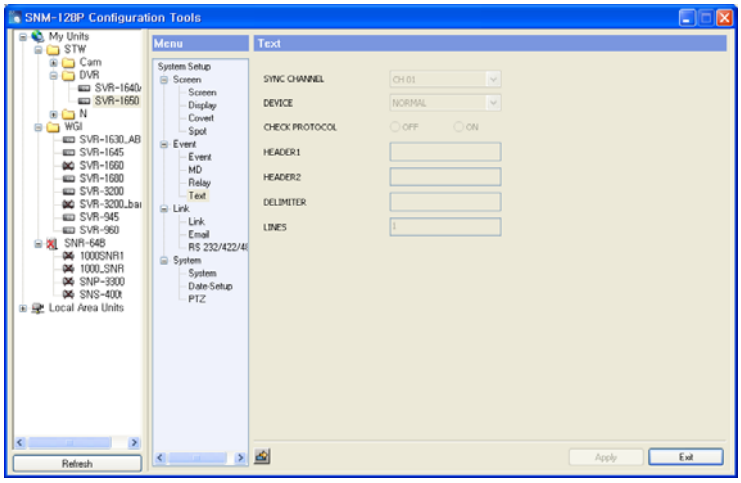
4.3.24.7 Relay



Select the actions for relays. Sensor, Motion, No Video, and Power On/Off can be toggled on or off.

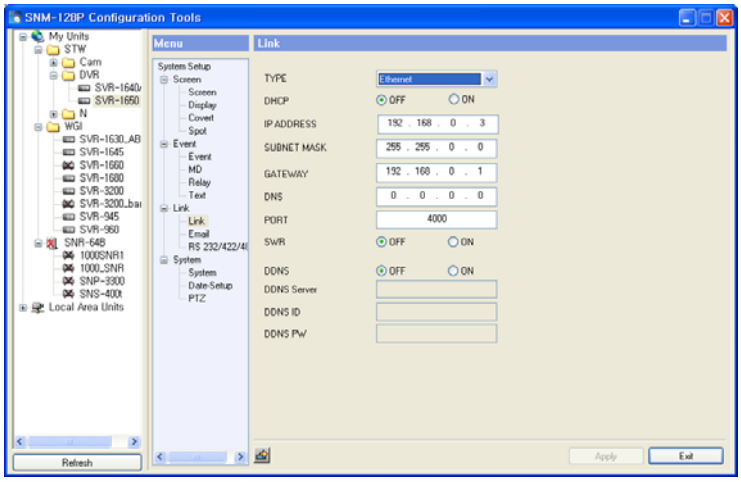
A relay is activated if at least one of Sensor, Motion, No Video, or Power On/Off is detected.

4.3.24.8 Text



These Text setup options are only remotely available in the console.

4.3.24.9 Link



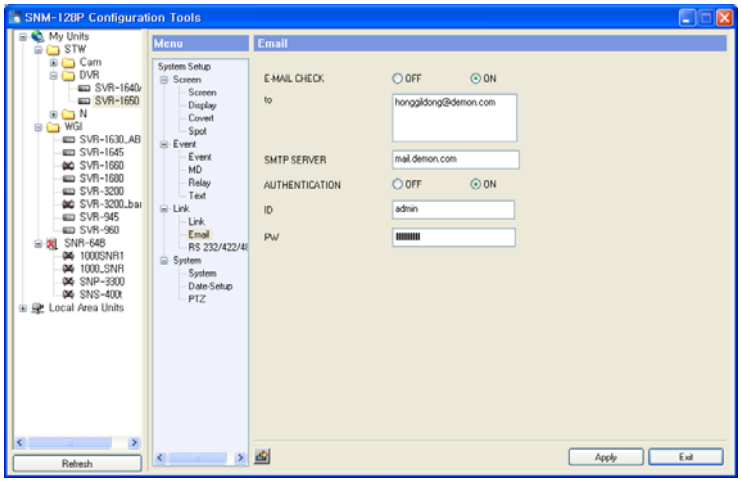
Set up network settings.Supported network types are Ethernet and xDSL. DHCP can be toggled off or on.

Please inquire with your network administrator to set up the IP address, subnet mask, gateway, and DNS options.

SWR can be toggled on or off.

To use DDNS, the DDNS option must be checked "On". Go to www.samsungipolis.com to the DDNS server box, and then use your ID and password to register a unit in the DDNS server.

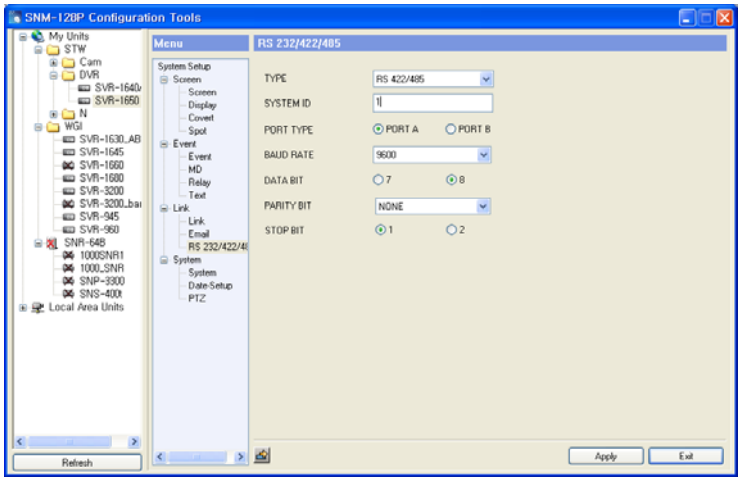
4.3.24.10 E-Mail



Set up the E-Mail settings. To use the E-Mail feature, DNS must be entered prior to the setup. Check "On" or "Off" in the E-Mail Check option to toggle the E-Mail feature. In the Recipient box, enter the e-mail address of the recipient, and the server address of the mail server in the SMTP Server box.

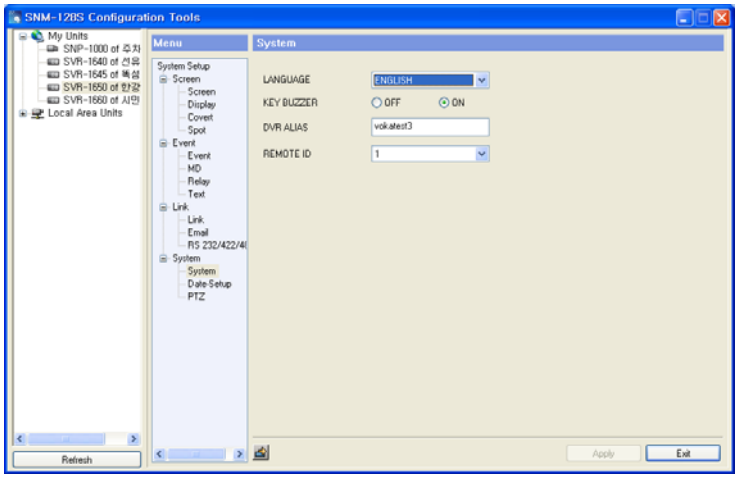
The Authorization option is to add permissions to outgoing e-mails. For the ID and PW boxes, use only alphanumeric characters.

4.3.24.11 RS232/422/485



Set up the RS232/422/485 serial settings. This is used to connect an external device via serial.

4.3.24.12 System

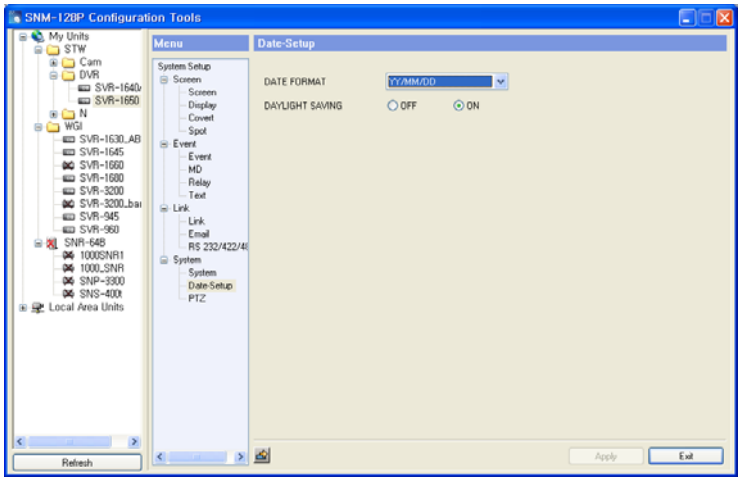


In the System settings, you can set Language, Key Button Sound, DVR Name, and Remote ID (Remote Controller ID).

In the Language option, select your language for a DVR. You can turn key button sounds off or on in the Key Button Sound option.

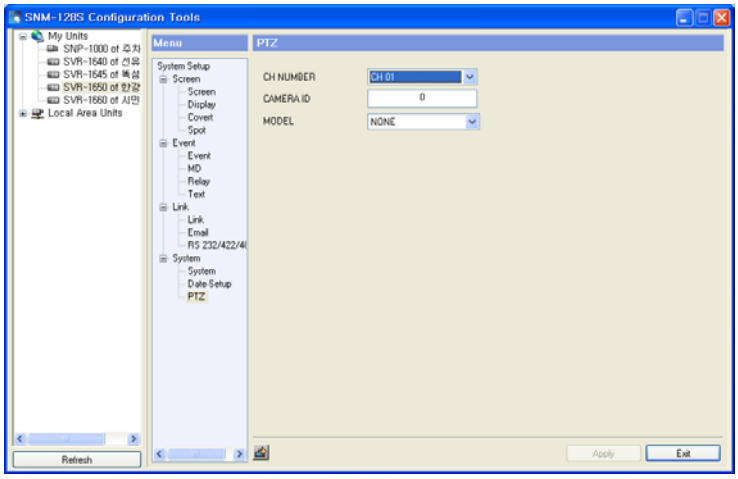
For the DVR Name option, enter a name for the DVR. For the Remote ID option, enter an ID to use with the remote controller; 1~16 and All can be selected.

4.3.24.13 Date Settings



Select a display type for the system date, and turn Daylight Saving Time on or off. You can change the system date only in the console, not remotely.

4.3.24.14 PTZ



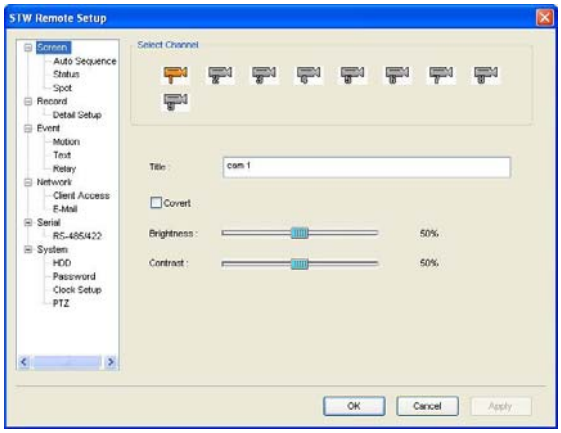
Select a camera ID and PTZ model for PTZ operation.

Enter the ID of a connected camera in the Camera ID section. For the Model, select the model of the connected camera.

4.3.25 SVR-940/450 Setup

This setup guideline is only for the SVR-940/45 model DVRs.

The images included in the following guideline may contain a different number of channels and menus depending on your product model.



The picture above is the initial screen of the Setup program when connecting to an existing DVR.

4.3.25.1 Screen Settings

In the Screen Settings page, you can select various options for channels such as the name, and the screen brightness.

Channel Name

Enter a name for a selected channel.

Hide Video

Show or hide the video of a selected channel in the Live Video screen.

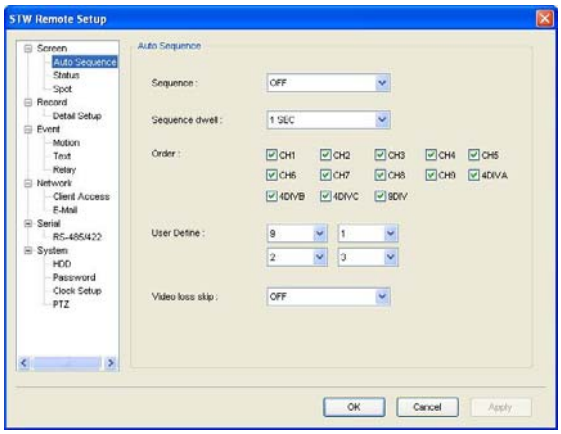
Brightness

Adjust the screen brightness.

Contrast

Adjust the screen contrast.

4.3.25.1.1 Auto Sequencing



The Live Screen displays the video of channels in sequence (Channel 1 → Channel 2 → Channel 3 → Channel 4) at defined intervals. In the [Auto Sequencing] page, you can select a channel-sequencing interval from 1 to 10 seconds.

Screen Sequence

Selecting On in the Sequence option activates the Auto Sequencing feature, and disables it if Off is selected.

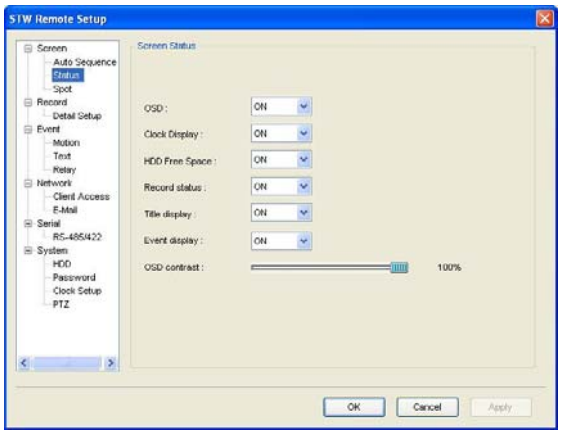
Sequence Dwell

Select an auto sequencing interval from 1 to 10 seconds.

Video Loss Skip

Selecting On in the Video loss skip option skips channels with no video input signals, and displays only ones that transmit video input signals.

4.3.25.1.2 Screen Status



Select the type of information to show on the Live Video screen.

OSD

Select On to display the status information on the screen.

Clock Display

Select On to display the current time on the screen.

HDD Free Space

Select On to display the free space in the HDD of a unit.

Record status

Select On to display the Recording icon on the edge of each channel icon.

Title Display

Turn on to display the channel titles (1 to 9 or 1 to 4 for the SVR-450) on the screen. The channel titles can be set up under the Channel Name menu.

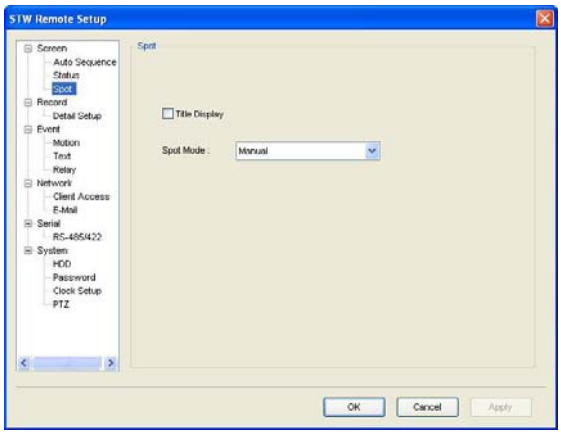
Event Display

Select On to display events on the screen.

OSD Contrast

Adjusts the depth of the menu font; selecting a higher % increases the depth.

4.3.25.1.3 Spot



*The Spot menu is only for the SVR-940.

Title Display

Check on or off to display the channel titles in Spot mode.

- Manual: : Select [Manual] and then save the settings.
  On the Live Video screen, press the number "0" button on the front of the product, or press the "10" button on the remote controller. Next press the number of a channel to display the channel as a Spot Mode monitor.
- Sequence : Activate only one Spot Mode monitor to display each channel in sequence.

4.3.25.2 Recording Setup

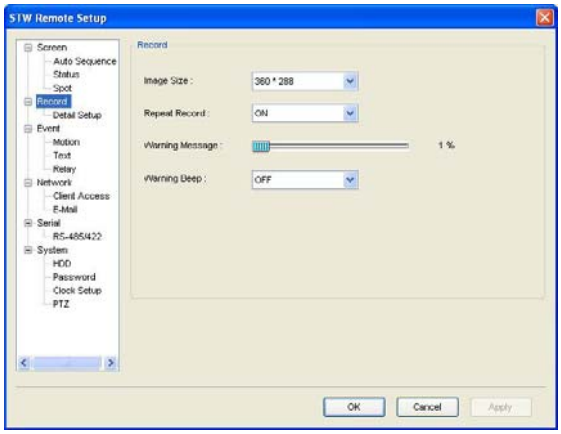


Image Size

Select a video size. The SVR-450 supports 2 sizes (360x240 and 720x480), and the SVR-940 supports 3 sizes (320x240, 720x240, and 720x480)

Selecting the largest size (720x480) improves the recorded image quality, but increases the file size and decreases the frame rate.

Repeat Record

Select to repeat the recording operation.

- On: : The unit keeps repeating the recording operation. If there is not enough space in the HDD, it overwrites the oldest data with new recording data.
- Off: : The unit keeps repeating the recording operation until there is no longer enough space in the HDD, and then aborts the operation.

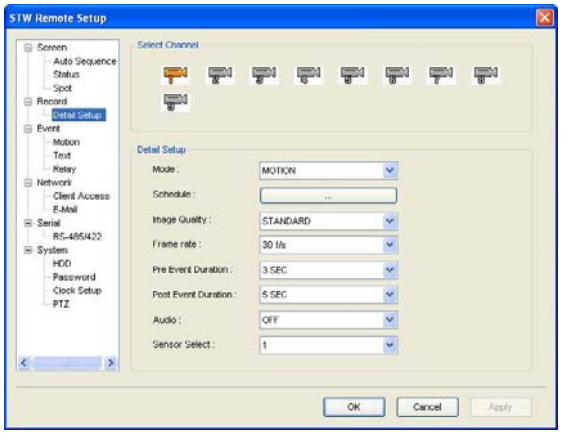
HDD Warning Message

Select a minimum % of free space left in the HDD to display an alert message. Available ranges are from 1 to 20%, with 5 to 10% being generally recommended.

HDD Warning Beep

Select On or Off to play an alert buzzer when the free space in the HDD reaches the previously defined %.

4.3.25.2.1 Detailed Recording Settings



Set up detailed recording settings.

Channel

Select a channel to apply the detailed settings to.

Recording Mode

Select a recording mode for the selected channel.

- Normal : Commands the channel to keep recording 24 hours.
- Motion : Commands the channel to start recording only if movement is detected.
- Sensor : Commands the channel to start recording only if a sensor is activated.
- TEXT : Commands the channel to start recording only if a Text event occurs.
- Scheduled : Commands the channel to record as scheduled.
- Off : Disables the recording feature.

Scheduled Recording Setup

To schedule recording by time and date, select "Scheduled" under Mode and set the hourly and daily recording. Scheduled Recording can be set up to 24 hours per day.

- S : Sensor Recording
- - : Recording Off
- C : Normal Recording Mode
- M : Motion Detection Recording
- T : Text Recording

Image Quality

Select High, Standard, or Low to adjust the image quality.

Frame Rate

Select images that can be recorded per second. At the 720x480 size, a maximum of 30 images can be selected, and a maximum of 120 images at the 360x240 size.

Pre Event Duration

Select a recording duration prior to an event. Select On to record a pre-event video for 5 seconds, and Off to disable the option.

Post Event Duration

Select a recording duration after an event from 1 to 20 seconds.

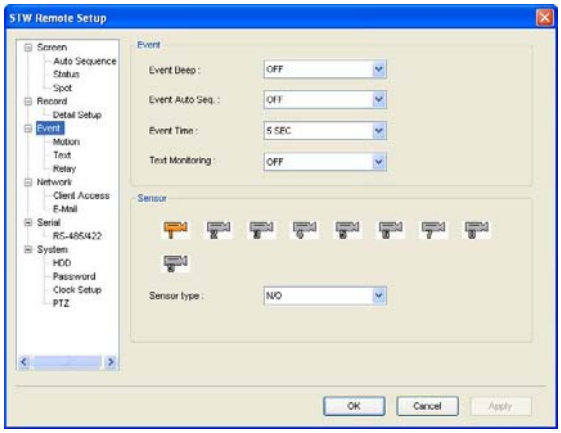
Audio

Select On or Off to record audio.

Sensor Select

Select a sensor type.

4.3.25.3 Event



Set the event menus of a DVR such as Motion Detection, Sensor, and Alarm.

Event Beep

Select On or Off to play a beep when an event occurs.

Event Auto Sequencing

Select On or Off to display an event screen in full screen mode.

Event Time

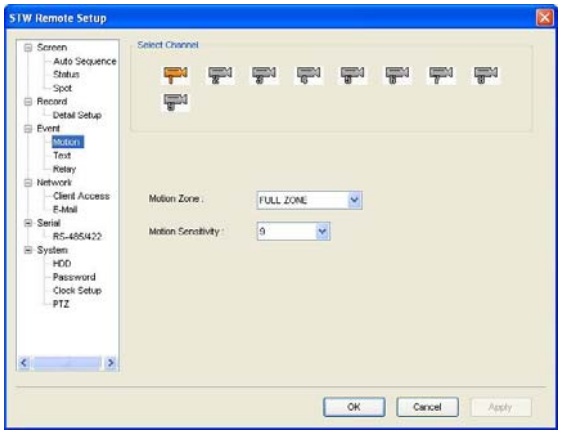
Select a duration to display an event screen. (3 to 5 seconds.) For the duration, events occurring in other channels are recorded, but the screen will not switch to the new event screens.

Sensor

Select a channel to set up a sensor.

- Sensor Type : Select a channel to set up a sensor.
- N/O : Normal Open Sensor
- N/C : Normal Close Sensor
- Off: : Disabled

4.3.25.3.1 Motion



When the recording mode is set to Motion Detection, set the motion zone and sensitivity for the channels.

Channel

Select a channel for the MD recording mode.

Motion Zone

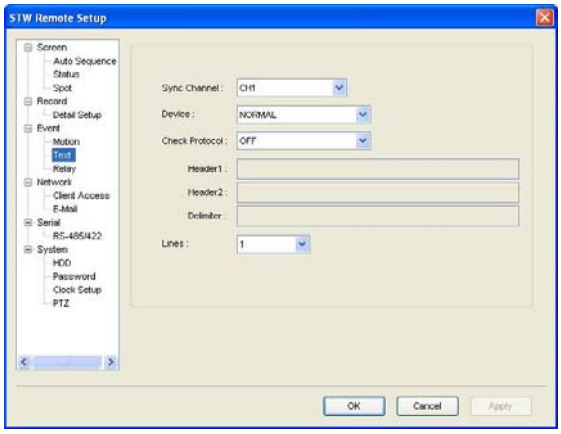
Available zones are Full and Partial.

- Partial : Records the entire screen when movement is detected.
- Partial : Records only a selected area on the screen when movement is detected.

Motion Sensitivity

Select a level for motion detection sensitivity. Levels are between 1 to 9 levels, with higher levels increasing the sensitivity of the camera to detect more subtle movements.

4.3.25.3.2 Text



Allows you to check the POS device data on the DVR video screen.

To synchronize the protocol with the input device, select Header 1, 2, Delimiter, and the number of lines to display on the screen.

Sync Channel

Select a channel to display the POS text data.

Device

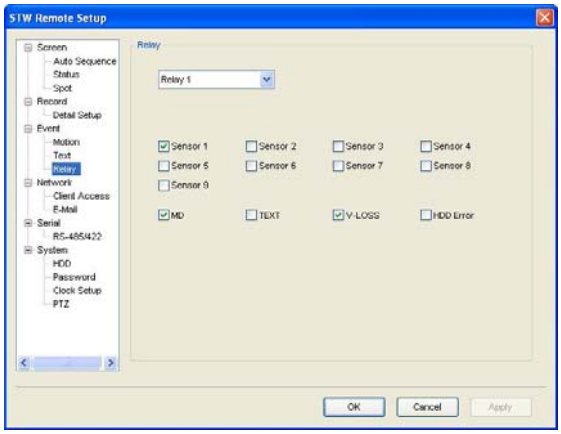
- Normal : Select when connecting to a barcode reader or other conventional POS device.
- Finger 007 : Select when connecting to a fingerprint reader.

Check Protocol

Header 1 / Header 2 / Delimiter

- Lines : Select the number of lines to display on one screen.

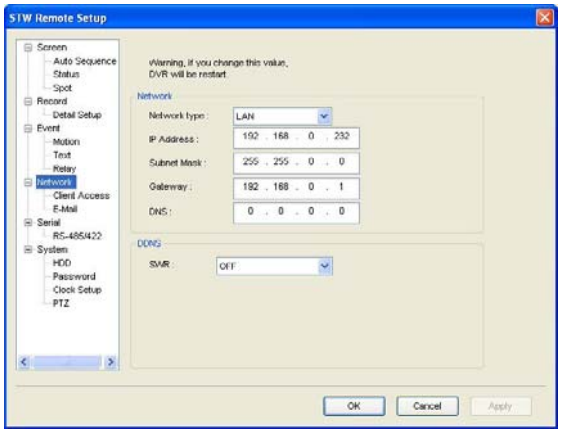
4.3.25.3.3 Relay



Select options to activate a relay.

- Sensor : Activate a relay when the sensor of a selected channel is activated.
- MD : Activate a relay when movement is detected.
- Text : Activate a relay when using POS.
- V-Loss : Activate a relay when video input signals are lost.
- HDD Error : Activates a relay when an error occurs in the HDD for a channel.

4.3.25.4 Network

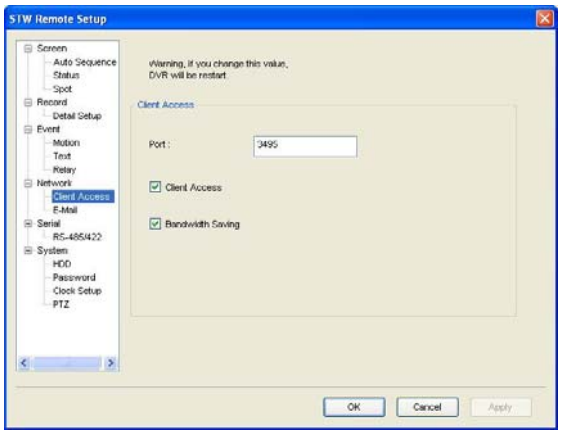


Set up information to connect a system to the network.

- Network Type : ADSL/LAN/DHCP
  : Select the network type to connect the system.
- IP Address : Enter the IP address of for a system (generally provided by your ISP).
- Subnet Mask : Enter the address of the subnet mask (generally provided by your ISP).

- Gateway : Enter the address of the gateway (generally provided by your ISP).
- DNS : Enter the address of the DNS server (generally provided by your ISP).
- ID : Enter the ID provided by your ISP.
- PW : Enter the password that matches the ID entered above.
- SWR On/Off : When using a dynamic IP (DHCP), the IP address keeps changing, so the actual IP address cannot be checked. To manage dynamic IPs, register the domain name that matches the IP address so that you can connect to the system using the domain name instead of the IP address when the IP address changes.
- DNS Server Domain Address : Enter the name of the DDNS server: www.samsungipolis.com.
- ID : Enter the ID registered at www.samsungipolis.com.
- PW : Enter the password registered at www.samsungipolis.com.

4.3.25.4.1 Connecting to Client



Port

Change a port to connect to a client.

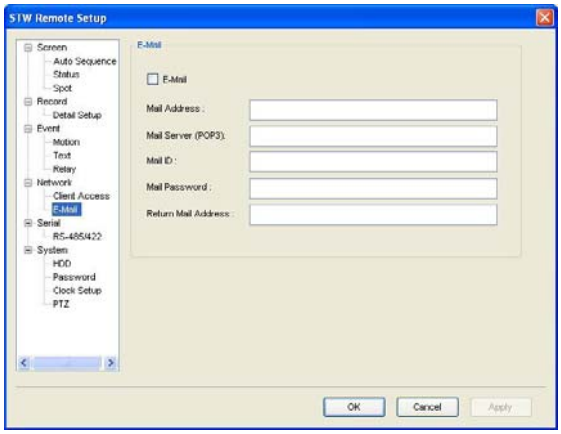
Client Access

Check to access a client DVR from a remote location.

Bandwidth Saving

Check to consume less bandwidth. When checked, only the standard frame of video is transferred. When unchecked, all video frames are transferred.

4.3.25.4.2 E-Mail



Set up an e-mail address to receive captured event images when events occur.

E-Mail

Check the E-Mail option to send e-mails, and uncheck it to disable the E-Mail feature.

Mail Address

Enter the e-mail address of the recipient.

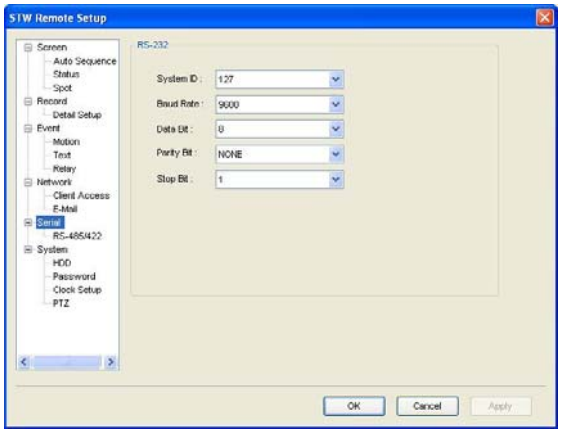
Mail Server

Enter the IP address of the outgoing mail server; please keep the default value.

Return Mail Address

Enter the e-mail address to receive e-mails returned from the recipient e-mail address.

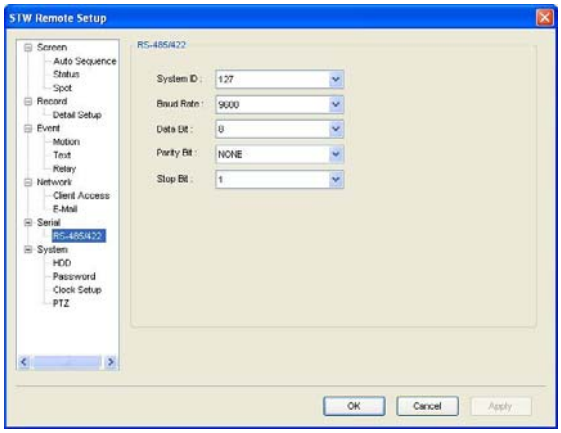
4.3.25.5 Serial (RS-232)



Configure settings to connect a POS device.

- System ID : Enter the ID for a system.
- Baud Rate : Select a data transfer speed (bits per second).
- Data Bit : Select a data transfer bit.
- Parity Bit : Select a type to check data transfer errors.
- Stop Bit : Select a bit transmitted after completing a data transfer.

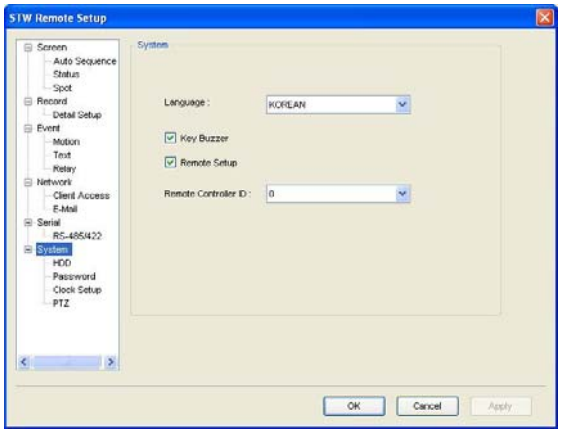
4.3.25.5.1 Serial (RS-485/422)



Configure settings to connect monitoring products such as cameras and CCTVs.

- System ID : Enter the ID of the system.
- Baud Rate : Select a data transfer speed (bits per second).
- Data Bit : Select a data transfer bit.
- Parity Bit : Select a type to check data transfer errors.
- Stop Bit : Select a bit transmitted after completing a data transfer.

4.3.25.6 System



Set up the general system information of a DVR.

Language

Select a language for the DVR. A total of 10 languages including Korean and English are available.

Key Buzzer

Check to activate a buzzer when the front button on the DVR is pressed.

Reset Settings

Reset the current settings to their factory defaults.

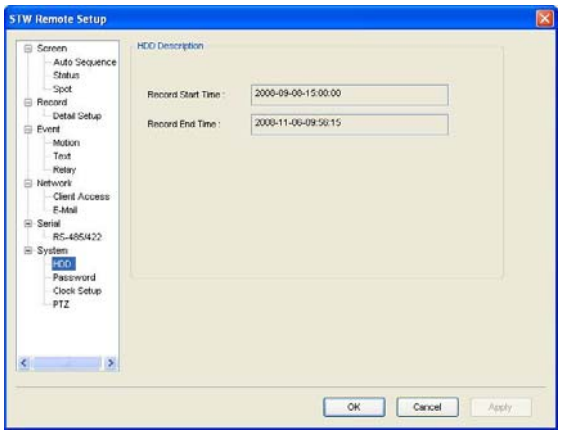
Remote Setup

Check to change the settings of the DVR from a remote location outside the network.

Remote Controller ID

Select the ID of the DVR remote controller; 0 to 9 are available.

4.3.25.6.1 HDD



To change these settings, you must access the DVR directly, not remotely.

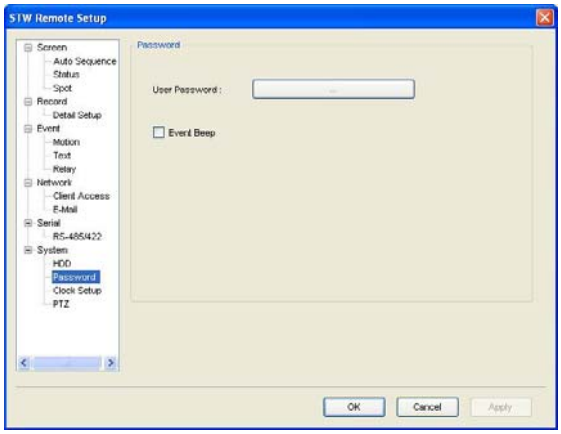
HDD Format

Delete or keep data recorded in the HDD of a selected DVR. To change this setting, you must access the DVR directly, not remotely.

HDD Information Display

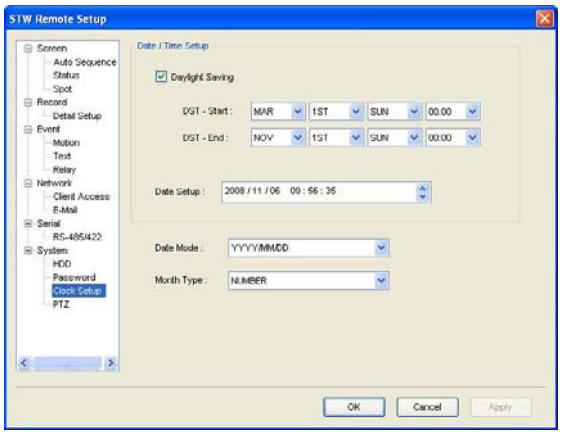
Displays information including the HDD capacity, and recording start and end times.

4.3.25.6.2 Password



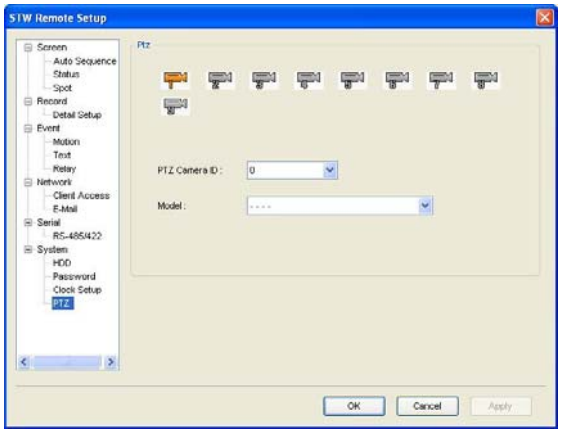
Limit the usage of options listed in the page by setting a password.

4.3.25.6.3 Time Setup



Set up time-related settings of a DVR such as the time and date, display type, and DST. When the time is set, the system automatically reboots itself to save the previous data.

4.3.25.6.4 PTZ



Set up the ID and model of a PTZ camera by channel.

Channel

Select a channel to set up the PTZ settings.

Camera ID

Select a camera ID from 0 to 255.

Camera Model

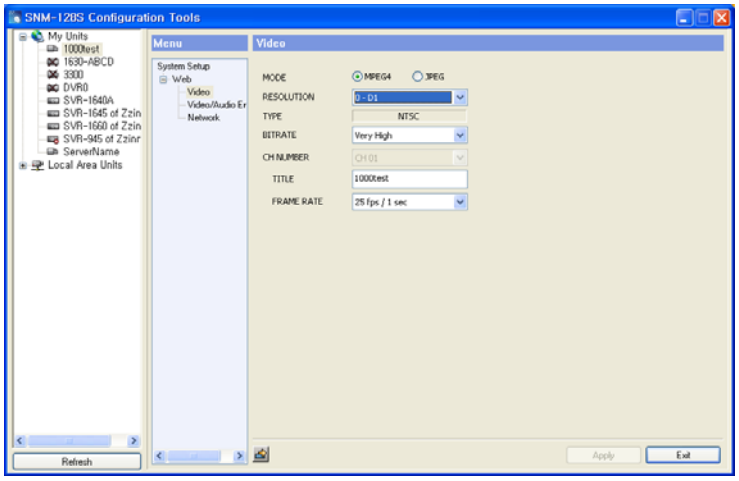
Select the model of the connected camera. The camera input signal varies depending on the manufacturer; please enter the correct model for the camera.

4.3.26 Web Server & IP Camera Setup

This guideline is to set up the web server and IP camera of the SNS-400/100, SNP-3300/3300A/1000/1000A, and SNC-550.

4.3.26.1 Video

Set up the video settings of a selected IP product.



Mode

Select an image compression standard: MPEG or JPEG.

Resolution

Select a resolution for the selected compression mode.

This resolution option applies to videos and images displayed in a web browser and the SNM-128P.

Type

Select the image source type for your country and region. e.g. **For Korea, select NTSC.**

Bit Rate

Select a network transfer speed to watch videos in a web browser or on the SNM-128P.

CH Number

Select to enter the title of a channel; **applies only to multi-channel products.**

Title

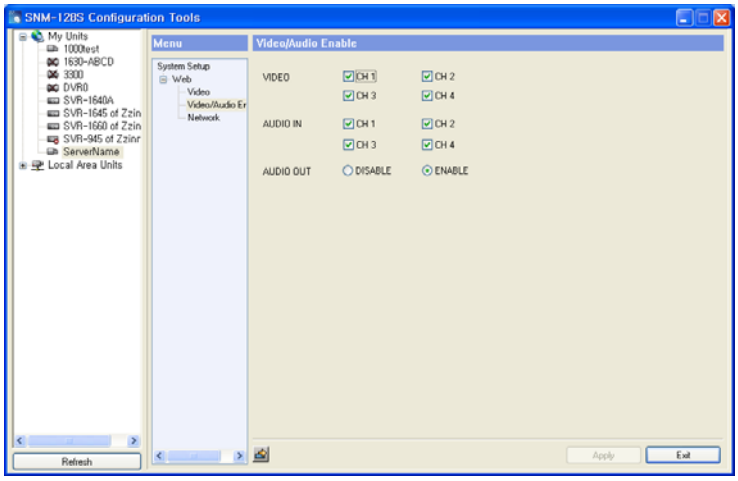
Enter the title of a channel to easily distinguish between channels.

Frame Rate

Select a frame rate to watch videos in a web browser or on the SNM-128P; selecting a higher frame rate renders frames faster, enhancing the quality and fluidity of video.

4.3.26.2 Video/Audio

Check to use Video and Audio features.



Video

Check to use a video input channel.

Checked channels are in use and unchecked channels are not in use.

Audio Input

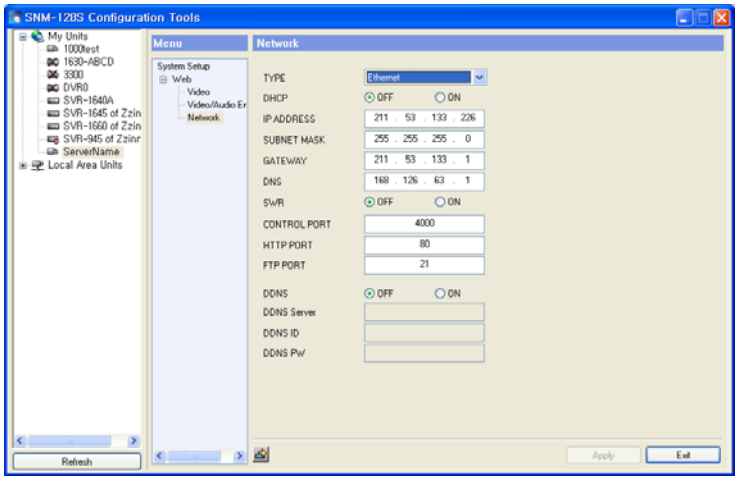
Check to use an audio input channel.

Checked channels play audio with video, and unchecked channels play only video.

Audio Output

Select Disable or Activate to activate the audio output for audio input channels.

4.3.26.3 Network



Enter conditions to connect to a network.

Simple network settings, SWR settings, and DDNS settings are available.

Simple Settings

To watch a video on the SNM-128P or a web browser, network connections must be established. To set up a network, inquire with your network administrator and enter the correct network information.

Required information includes the IP address, subnet mask, and gateway.

SWR

To use SWR, select On and then enter the DNS address. For the DNS address, please inquire with your network administrator.

DDNS

The DDNS settings are to register a product in the DDNS server.

You must first register an ID with the DDNS server in order to register your products.

After the ID registration, enter the DDNS server address, ID, and password in this page.

Chapter 5. Scheduled Backups

The Scheduled Backup program allows you to back up video data saved in DVR unit hard disks to a different hard disk at scheduled intervals. Only the administrator ID can activate this option using the unit information registered under the ID.
Only the SVR-3200/1680/1660/1645/960/945 models support this option.

Backup saves the video data from a hard disk to a different computer.

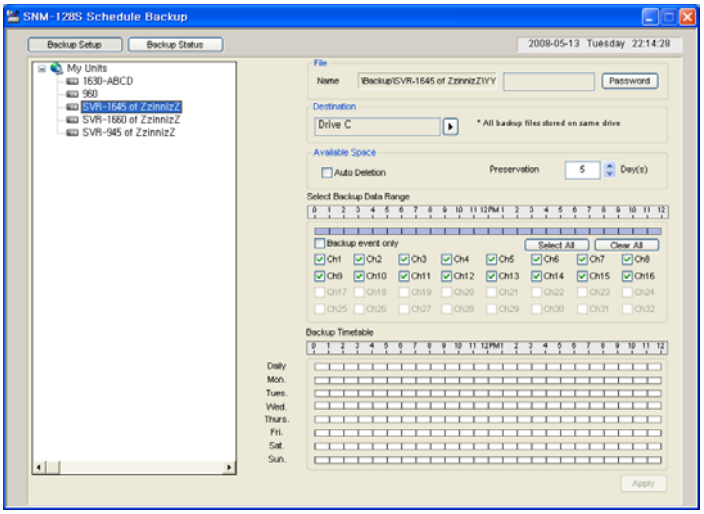
Using Scheduled Backup, you can schedule backups at your convenience. The backup program performs the backup operation automatically at the scheduled time.

To start a backup, the Backup program must be running in the background. If the SNM-128P program is successfully installed, the backup program is listed in the Startup Program list, and runs automatically each time the system is rebooted.

This Scheduled Backup program can back up the data of only 1 unit per computer, and allows only 1 administrator to activate the backup operation of the 1 unit.

Backup files are saved in a directory on the backup computer, and can be played through the SNM-128P search program.

5.1 Backup Setup



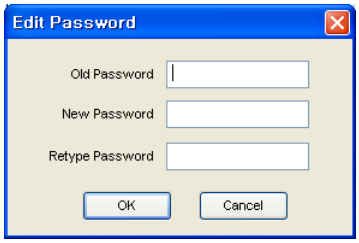
5.1.1 Backup File

The filename of for backup files is automatically formatted as YYYYMMDD_HH_MM_SS (Year/Month/Date_Hour_Minute_Second).

Backup files are saved in folders by unit, and the folder name is automatically formatted as \Backup\Unit Name\. The unit name used for the folder name is identical to the unit name shown in the left tree. Unit names can be changed by using the Network Manager Configuration Tools.

The names of backup files and folders are immutable and cannot be customized.

5.1.2 Password Setup



This security feature allows you to set a password for backup files so that only users that with the password can open them.

To set a password, click the [Password] button to open the password input window.

The default password is blank. When setting a password for the first time, leave the current password section blank and enter only the new password.

Password-protected backup files require the password to play the videos in the [Search] program.

5.1.3 Backup File Retention Period Setup

When backup files are continuously saved in a computer, the hard disk soon fills up and is no longer able to save backup files. As such, you should either delete old backup files from the backup computer on a regular basis or manually move them to another storage media such as tape or optical disc.

To manage backup files effectively, choose a retention date/period for backup files to delete them automatically when they 'expire'.

To set a retention date, click the numeric spin buttons under [Retention Period] and adjust the value. The period can be from 1 day to 365 days with a default value of 5 days.

When the retention period expires, backup files are automatically deleted from the backup computer. Three different checkpoints for the retention period are provided: first is when the [Apply] button is clicked after a backup operation is scheduled, and second is when the backup program starts operating. In these two cases, the backup program counts 24 hours from the checkpoints to determine the retention period. Last is when a message window appears alerting that there is insufficient backup space in the hard disk.

In this case, a message window appears prompting you to delete backup files if they have expired. Clicking OK deletes the expired backup files.

The backup retention period starts counting based on the recording date of the first frame.

5.1.4 Backup Drive Setup

Select a drive to backup video files. For a hard disk with multiple partitions or a computer with multiple hard drives, you can choose which drive to use for backups.

A combo box appears displaying all drives in the computer with free space information. Select the drive to backup the video files.

More than one drive can be selected to back up video files. When Drive F, G, and H are selected, for instance, the backup program starts backing up files to Drive F, and then moves to G and then H as the drives become full.

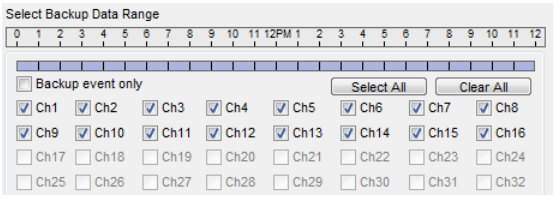
Backup files for all cameras are saved in the same drive. Once a backup drive is selected, every backup file created afterwards is saved to that drive.

You cannot select a different backup drive for each unit.

5.1.5 Auto Removal Setup

Checking this option automatically deletes backup data from the backup hard disk or backup drives if they do not have enough space. The backup program deletes the oldest backup files from the hard disk or drives until enough space is freed up.

5.1.6 Backup Data Area Setup


Select Backup Data Range
0 1 2 3 4 5 6 7 8 9 10 11 12PM 1 2 3 4 5 6 7 8 9 10 11 12
Backup event only
Select All
Clear All
Ch1 Ch2 Ch3 Ch4 Ch5 Ch6 Ch7 Ch8
Ch9 Ch10 Ch11 Ch12 Ch13 Ch14 Ch15 Ch16
Ch17 Ch18 Ch19 Ch20 Ch21 Ch22 Ch23 Ch24
Ch25 Ch26 Ch27 Ch28 Ch29 Ch30 Ch31 Ch32

Check which channels should be backed up.

You can select a backup timeline based on the recording time of a video file. You can backup the video file only within the selected timeline, even if the video file contains data recorded up to 24 hours.

To select a timeline, click the hourly blocks. To deselect an hourly block, click the block again.

Using the channel checkboxes from Ch1 to Ch16 (32), you can backup data from only the selected channels. All channels are selected by default. Depending on the type and settings of a unit, checkboxes are enabled only for channels that can be backed up.

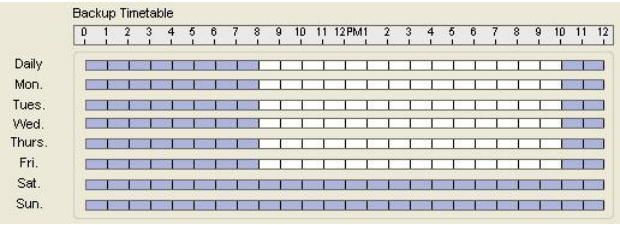
To deselect all channels, click Uncheck All.

To select all channels, click Select All.

To backup only event data, check the channels and then check [Back Up Event Only].

The Backup Area, Channels, and Event settings apply to all schedules added to the Backup Schedule table.

5.1.7 Backup Schedule Setup



Select a backup date and time for each camera. Selected backup schedules are displayed in the Weekly Backup Schedule table.

The Backup Schedule table displays the combined backup schedule for all cameras. Hours that are scheduled for backup are displayed in a different color. White blocks in the timetable are not scheduled for backup and available for new schedule.

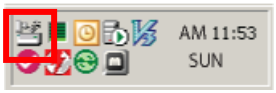
Placing the cursor on a scheduled hourly block displays the name of the active camera in a tooltip.

Backup timelines are defined in hour-long blocks. Click white blocks to schedule those hours for backup. To deselect an hourly block, click the block again. The Backup tasks run weekly for each backup block. e.g. If 08pm to 12 midnight on Monday are scheduled for backup , for instance, the Backup program performs the backup operation every Monday.

To run daily backups, schedule a backup on the Daily timetable. When a backup is scheduled on the Daily timetable, the Backup program performs the backup operation for the selected time every day except Sunday. Hours scheduled for daily backup cannot be scheduled with weekly operations. To backup on a weekly basis, select a day and then timelines.

The Backup program performs backups only during scheduled hours. Backups are aborted—even if not all data is backed up—when the scheduled duration expires; backups then move on to another backup operation.

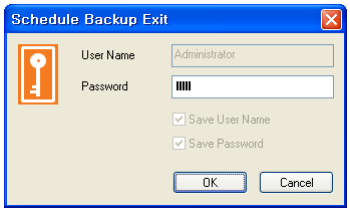
5.1.8 Backup System Tray Icon



When the backup computer is rebooted, the Backup program starts running automatically in the background, displaying the Backup program icon in the Taskbar Notification Area (system tray). While a backup running, the icon displays the backup progress.

To open the program menu, right click on the icon in the system tray.

Choose [Open] to display the progress of the current backup. Selecting [Close] cancels the Backup program running in the background.



Terminating the Backup program requires the administrator password.

5.1.9 Creating Backup File

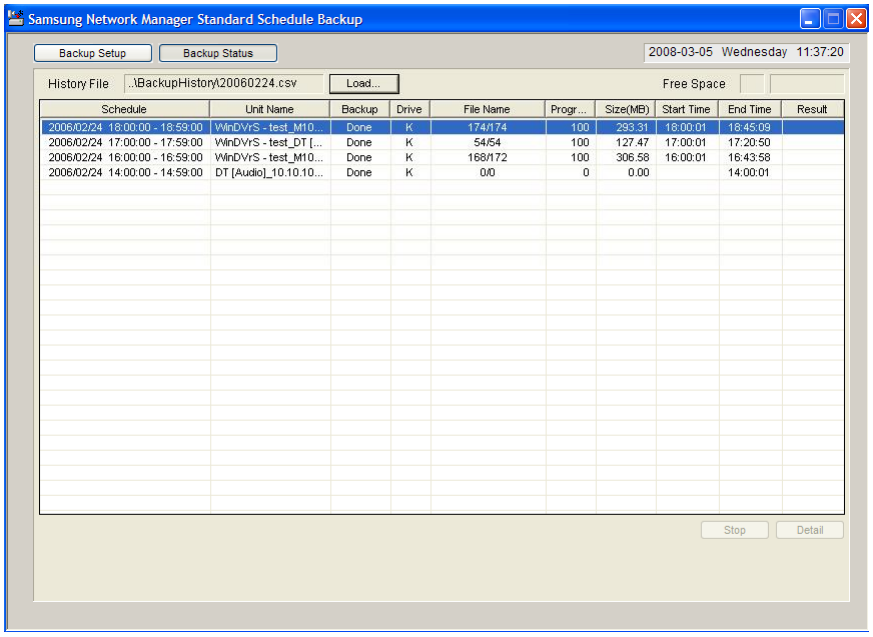
A backup file is created once every hour per unit.

While backups are running, if the connection between a unit and the backup computer is broken, the Backup program continues trying to reconnect. If a connection is re-established, the program continues the backup and creates another backup file with a different name.

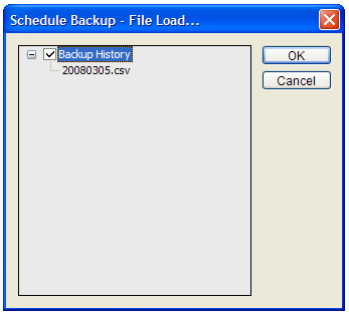
Backups begin at 00 minutes of the hour, and finish at 59 minutes of the hour.

If the Current Time Zone settings change during a backup operation, the Backup program aborts and restarts the current operation.

5.2 Backup Status

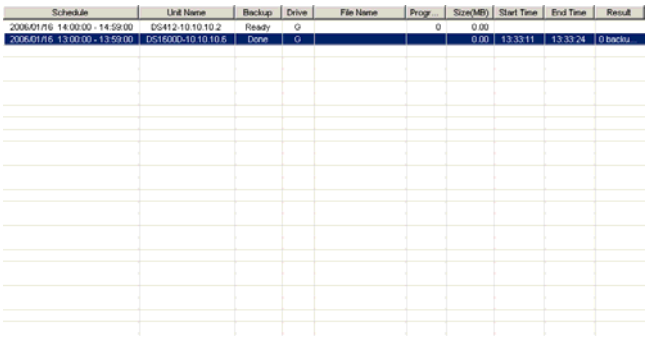


You can check the backup status on a daily basis. The initial window shows the schedule and status of backup operations for the day.



The history of past backups is saved in the program. To review the history, click the "Load" button.

5.2.1 Backup Operation Status Table



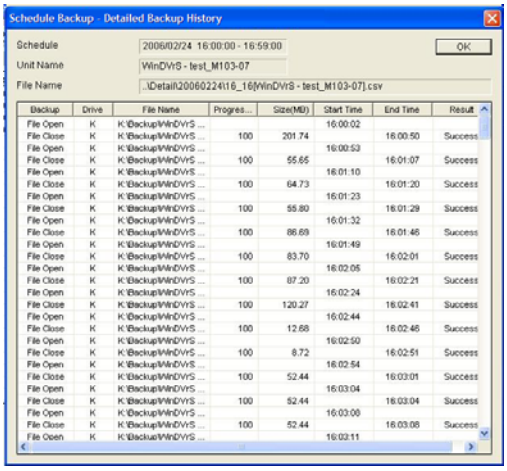
The detailed information of a scheduled backup is displayed in the Backup Operation Status table.

Available information includes "Schedule," "Unit Name," "Backup," "Drive," "Filename," "Progress," "Starting Time," "Ending Time," and "Results".
If a backup operation is in progress, the backup operation is displayed as "Backing up..." under the [Backup] category. You can check the progress of the backup under the [Progress (%)] and [Size (MB)] categories.

Pending backups are displayed as [Ready] and completed operations as [Completed].

5.2.2 Viewing Detailed Information

To check backup details, select a schedule and then click the [Details] button.



"Detailed Backup History" displays backup files and their sizes in MB.

5.2.3 Aborting Backups

To abort a backup, select the schedule and then click the [Abort] button.
When a backup is aborted, the Backup program finalizes the backup file at the point that it was aborted.

The [Abort] button is enabled only when a backup is running and selected.

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